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ECONOMIC HISTORY

(A SUPPLEMENT TO THE ECONOMIC JOURNAL)

VOLUME I

3a

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ECONOMIC HISTORY

(A SUPPLEMENT TO THE ECONOMIC JOURNAL)

PUBLISHED BY

The Royal Economic Society

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EDITED BY
J. M. KEYNES and D. H. MACGREGOR

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THE ECONOMIC JOURNAL
(ECONOMIC HISTORY SERIES No. 1)
JANUARY, 1926

THE EARLY DEVELOPMENT OF ECONOMIC CONCEPTS

It is the fashion to-day for teachers of elementary economics to plunge the student at once into the maelstrom of our modern economic organisation, an intricate product of the cumulative civilisation of ages. The student is expected to disentangle economic theory from what appears to him a mass of totally unrelated facts. In his mind economic laws loom up almost unconsciously as recent inventions or new discoveries. Little regard, if any, is given to the fact that in the background of fundamental economic concepts there lies a long historical evolution. Conceding that it is easier to comprehend a problem by proceeding from the simple to the complex, it would appear that a little consideration given to the gradual unfolding of economic concepts in the minds of primitive races would afford a perspective of incalculable worth to the student. This fact was recognised years ago by Professor Carl Bücher in his valuable work *Die Entstehung der Volkswirtschaft*, in which he devoted the early chapters to the economic life of primitive peoples.

It is the purpose of this article to supplement Bücher's account of the economic life of primitive races with ethnological data concerning the development of economic concepts in the minds of the backward races of to-day, especially under conditions of contact with advanced societies. Of the primitive peoples extant at the present time the greatest number and the most divergent degrees of native culture are to be found in Africa, which thus furnishes an excellent example for such a study as we now have under consideration.

The vast majority of the native tribes of Africa were well acquainted with trade in some manner or other. Natural conditions fostered inter-communication. The vast extent of the Black Continent and the gradations of climate and temperature produced a wide variety of natural products, some peculiar to the

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The vast majority of the native tribes of Africa were well acquainted with trade in some manner or other. Natural conditions fostered inter-communication. The vast extent of the Black Continent and the gradations of climate and temperature produced a wide variety of natural products, some peculiar to the

tropics, others to the temperate zone. Moreover, innumerable opportunities were offered to the African races for indigenous culture and inter-group specialisation. Thus some tribes were specialised in the manufacture of cotton goods, others in iron-work; some societies were primarily agricultural, others pastoral, and in the forest many groups were to be found in the most primitive hunting stage. With these facts in mind we can expect to find trade and commerce in various phases of evolution at the time of the earliest contact with the Caucasian races.

There are but few cases of African tribes which appeared totally unused to barter or exchange at the time of the white man's arrival. It seems that the Bushmen had little or no notion of commercial exchange; the idea appeared absurd to them. The Hottentots, though farther advanced in most ways, were on the same plane as the Bushman with respect to exchange. But once the concept had been gained, they quickly adapted themselves to it. Furthermore, the Hottentots were not devoid of resources for developing trade; they had their flocks and herds; they knew how to prepare and preserve the hides, manufacture pottery, forge iron and even shape and polish bracelets made of ivory. Even when, however, the benefits of trade are patent to the aborigines they seem unable to take advantage of the situation and to provide themselves with sufficient quantities of their own native products which may be had with a little exertion in order to build up a profitable trade. Their lack of foresight tends to put them in a disadvantageous position when dealing with foreign peoples, and not having the necessary price good, they tend to appropriate from the whites whatever they can.[1]

The most primitive form of peaceful exchange was that by means of reciprocal gifts. It has become a customary mode of trade among many of the native races of Africa. Thus Mungo Park writes: "Presented Mansa Kussan [the chief man of Julifunda] with some amber, coral, and scarlet with which he appeared to be perfectly satisfied, and sent a bullock in return."[2] Whether or not exchange by mutual gifts arose out of efforts to propitiate, as Spencer alleges, the fact remains that the responsive present should have a value approximately equal to the original one; there existed a crude valuation process in the minds of the aborigines. The Bihénos refused to sell anything to the European, but according to custom made a present of it, and in return extorted as much as they could until European travellers found

[1] Letourneau, *L'évolution du commerce*, pp. 39–41.

[2] Mungo Park, *A Journal of a Mission to the Interior of Africa*, pp. 160–1.

it necessary to refuse all presents.[1] In the countries of the Sudan the constant giving of presents as a means of trade had become so well established that the natives declined to deal with the whites in any other manner; the donors soon learning that a departure from their old custom of gifts to one of direct barter was not profitable, owing to the liberality of the European in the first case.[2]

Dumb barter or silent trade represents a step beyond the mutual exchange of gifts in that there is an evaluation by the traders on both sides. Further, it is a trading relationship which first arises with members of the "out-group." It is the most primitive type of foreign trade as concerns the tribe or clan, and usually occurs where one of the parties represents a relatively high, and the other a relatively low type of culture. It has been suggested that this is a method adopted by travellers belonging to civilised peoples to open commercial relations with savages who shun their approach.[3] It is probable that silent trade with the members of outside groups arose "from a sense of personal insecurity, and has fetish in it, the natives holding it safer to leave so dangerous a thing as trafficking with unknown beings—white things that were most likely spirits, with the smell of death upon them—in the hands of their gods."[4] Claude Jannequin, Sieur de Rochfort, quoted by Miss Kingsley, describes the system of dumb barter in West Africa in 1639:

> "'In this cursed country there is no provision but fish dried in the sun, and maize and tobacco.' The natives will only trade by the French laying down on the ground what they would give for the provisions, and then going away, on which the natives came and took the commodities and left the fish in exchange."[5]

The pigmy race of the Batuas or Akkas, living on the stage of the lower nomads, carried on all their exchanges with outsiders by means of dumb barter.[6] Silent trade was found to exist in many parts of Guinea, especially in regions well away from Europeanised settlements. That the natives had some concept of the value of the goods offered for sale is evident from the fact

[1] H. Capello and K. Ivens, *From Benguella to the Territory of Yacca*, I, 116.
[2] Staudinger, *Im Herzen d. Haussaländer*, 2nd ed., pp. 216–7 (quotation).
[3] P. J. H. Grierson, *The Silent Trade*, p. 63.
[4] Mary H. Kingsley, *West African Studies*, p. 249.
[5] *Ibid.*, p. 248.
[6] W. Junker, *Travels in Africa*, III, 85–6.

that against each class of articles so many cowrie shells or beans were placed, thus indicating the price.[1]

Wholesale and retail trade carried on for profit by the native races is largely a product of contact with civilised nations. The vague ideas of property rights in the individual, coupled with the usual tenets of tribal property, served to hold back the development of such professions. Bücher says:

> "Trade in the sense in which it is regarded by national economy—that is, in the sense of the systematic purchase of wares with the one object of a profitable re-sale as an organised vocation—can nowhere be discovered among primitive peoples. Where we meet native traders in Africa, it is a question either of intermediary activity prompted by European and barbarian merchants, or of occurrence peculiar to the semi-civilisation of the Soudan. Otherwise the only exchange known to the natives everywhere is exchange from tribe to tribe. This is due to the unequal distribution of the gifts of Nature and to the varying development of industrial technique among the different tribes." [2]

That exchange from tribe to tribe took place is evident from the fact that English wares deposited at Mombas, on the eastern side of South Africa, have been recognised at Mogador, on the west coast of Northern Africa.[3]

Regardless of the fact that there existed indigenous products of such a nature that they formed a natural basis of trade, commerce in the modern economic sense scarcely existed before contact with advanced races. This is because such multifarious products as had become the backbone of trade among Europeans had little or no use in the primitive economy. The native races in their primitive condition are influenced by few needs, that is, those things which are requisite for maintenance on the standard of living, if we may term it such, to which they are accustomed. Trade does not supply those needs, because the materials for native existence are ready at hand in the vegetable and animal life of the forest and plain. Not until the needs of the native have been multiplied and made more complex by the spread of civilisation will the trader be able to undertake the beneficent rôle of supplying needs as distinct from wants, which we may take to

[1] Mary H. Kingsley, *West African Studies*, p. 248. Miss Kingsley gives a number of additional examples of silent trade occurring in West Africa, pp. 241–7.

[2] Carl Bücher, *Industrial Evolution*, p. 60.

[3] Th. Waitz, *Anthropologie*, II, 101.

represent desires for things in no wise essential to the prevailing life standards of the aborigines. Wants develop trade with savages—not needs. Wants have to be created by the traders or companies in order to persuade the natives to bring down the natural products of the country to the coast. Existing wants have to be quickened. Thus the native peoples wanted firearms in order to slay more quickly, and to enslave each other. They wanted distilled spirits because European alcohol gratified their love of strong drink more fully than native liquor.[1] Miss Kingsley strikes the same keynote when she speaks of West Africa.

> "There is not a single thing Europe can sell to the natives that is of the nature of a true necessity, a thing the natives must have or starve. There is but one thing that even approaches in the West African markets to what wheat is in our own—that thing is tobacco." [2]

Where needs are few and well supplied by Nature, and where contact is unable to beget new wants owing to the extreme conservatism or to the aloofness of some tribes, particularly nomads, trade develops very slowly. The first Europeans found but few spurs to trade and intercourse among the Hottentots. They had regard for cattle, sheep and ivory only—occasionally parting with cattle for the tobacco of the Dutch and English, and sometimes disposing of ivory which they had collected.[3] The natives of the German colonies did not present a profitable market for the Teuton's wares. The native peoples either had little to give in exchange for European goods, or their needs were so few and their improvidence so great that they did not take advantage of the resources at hand. The Herero clung to their one form of wealth, cattle, with religious zeal, and would never part with an animal unless it was old, sick or bewitched. Cattle had greater attractions for them than the lure of German trade goods. Contact with the whites did develop a few wants, powder, guns and alcohol, a demand which the Government was unwilling to supply.[4]

With the Africans, as with all primitive peoples, the trade goods which had the readiest market were those that appealed to the vanity of the person. Thus beads, blankets, red caps, blue and red coral, gloves and the like usually commanded a ready sale. That the Arab and the white trader took every advantage of the

[1] A. J. MacDonald, *Trade, Politics and Christianity in Africa and the East*, pp. 4, 5, 6.

[2] Mary H. Kingsley, *West African Studies*, p. 339.

[3] F. Ratzel, *Völkerkunde*, I, 703. [4] A. G. Keller, *Colonization*, p. 568.

ignorant savage in bartering trinkets and trifles for valuable commodities is so well known that it would be useless to cite examples. The fact is that as long as the savage can be kept in ignorance as to the foreign trader's valuation of native commodities, as long as the trader can maintain a seller's market in which the natives are bidding for his trade goods, and as long as other dealers are kept out of the field, so long will the aborigines exchange goods of great value for worthless baubles. However, as soon as competition arises on the part of white or Arab traders, and the quantity of trade goods increases, the transactions lose their one-sidedness and unfair appearance,[1] as is evident from Barbot's remark on the Gold Coast trade:

> "The blacks, having traded with Europeans ever since the fourteenth century, are very well skilled in the proper qualities of all European wares and merchandise vended there; but in a more particular manner since they have so often been imposed on by the European, who in former ages made no scruple to cheat them in the quality, weight and measures of their goods, which at first they received upon content, because they say it would never enter into their thoughts that white men were so base as to abuse their credulity. . . . But now they are perpetually on their guard in that particular, examine and search very narrowly all our merchandise, piece by piece, to see each the quality and measure contracted for by samples; for instance, if the cloth is well made and strong—if the knives be not rusty—if the basons, kettles and other utensils of brass and pewter are not cracked or otherwise faulty, or strong enough at the bottom. . . . Taste and prove brandy, rum or other liquors, and will presently discover whether it is not adulterated with fresh or salt water or any other mixture." [2]

The savage's understanding of elementary economic principles is very limited. The ivory market in the Congo illustrates this fact very well. During the war there was very little demand for ivory because it was a luxury. With peace came a big demand, the price soaring to more than 200 francs a kilo, whereas the ordinary price is about forty. For a few months this condition lasted, then came the inevitable reaction, and with it a unique situation.

[1] W. S. Lindsay, *History of Merchant Shipping and Ancient Commerce*, I, 23.
[2] Quoted by Mary H. Kingsley, *West African Studies*, pp. 622–3.

> " In their mad desire to corral ivory the traders ran up the normal price that the native hunters received. The moment the boom burst the white buyers sought to regulate their purchases accordingly. The native, however, knows nothing about the law of demand and supply and he holds out for the boom price. The outcome is that hundreds of tons of ivory are piled up in the villages, and no power on earth can convince the savage that there is such a thing as the ebb and flow of price." [1]

Place value is no more readily understood by the African than time value. Thus the natives in the neighbourhood of Blantyre Mission demanded the same price in the interior that they were accustomed to receiving at the coast. They would rather transport all their goods to the coast stations than sell it for a trifle less and be spared the burden of carrying it great distances.[2]

> " A thing that the ordinary native cannot understand is that the farther you go inland, the dearer will be the articles imported, such as calico, etc. I have often heard natives complain bitterly that the shops of Nairobi are more expensive than those of Mombasa, and those of Entebbe than Nairobi, and so on.
>
> " Commenting on this to a shrewd trader in Nyasaland, he said that natives often complained to him that they could get calico at 4*d.* a yard at Blantyre, about five days' distance, whereas he charged them 5*d.* To have said, ' All right, you go down to Blantyre and buy your calico,' would not have convinced the native at all that it was not an exorbitant charge. He would think nothing of going down ten days to expend 8*d.* on two yards of calico. Time is not money to the African.
>
> " ' But lor' bless 'ee,' said the trader, ' there are always means of explaining to the native. I say, All right, you go and hunk me up a load of calico from Blantyre for nothing, and I will then sell you as many yards as you like for 4*d.*' This argument was self-convincing." [3]

In course of time, however, some blacks come to recognise the difference in value of commodities according to place. The Congo River native is perhaps the shrewdest in all Central Africa,

[1] Isaac F. Marcossen, *An African Adventure*, p. 180.
[2] Duff MacDonald, *Africana*, II, 144.
[3] C. H. Stigand, *Hunting the Elephant in Africa*, pp. 280–1.

and knows very well indeed that some commodities can be procured for little or nothing where plentiful, and disposed of for a considerable profit at population centres. That explains why the Bangalas take positions as firemen and wood-boys on the river boats; they want to go into business. They acquire considerable stores of food, palm oil and dried fish at the various stops made by the steamers while in the interior, and dispose of it with great gain at the end of the journey.[1]

Mungo Park observed that some of the negro peoples whom he visited could not understand the eagerness of the Europeans for ivory. Shown ivory handles on knives, combs, toys and the like, they could see that the handles were of ivory; but why build ships and undertake voyages to procure an article which had no other value than for furnishing handles to knives and other objects when wood would answer the purpose equally well? They were quite convinced that ivory was used for some secret or magic processes which were concealed from them lest the price of ivory should go up.[2]

Although exchange by means of reciprocal gifts still persisted in parts of Africa, most of the tribes at the time of early contact with the European races appeared to be on the stage of a barter economy. Books of travel in Africa abound with illustrations of the difficulties to be met with where no medium of exchange exists. In Kukawa,

> "A small farmer who brings his corn to the Monday market . . . will on no account take his payment in shells, and will rarely accept of a dollar; the person therefore who wishes to buy corn, if he has only dollars, must first exchange a dollar for shells, or rather buy shells; then with the shells he must buy a *Kúlgu* or shirt; and after a good deal of bartering he may succeed in buying the corn."[3]

Cameron experienced the same difficulties at Kawele, where he desired to hire a canoe and the owner wished to be paid in ivory:

> "I had none," he says, "but I found that Mohammed ibn Salib had ivory, and wanted cloth. Still, as I had no cloth, this did not assist me greatly until I heard that Mohammed ibn Gharib had cloth and wanted wire. This I fortunately possessed. So I gave Mohammed ibn Gharib the requi-

[1] Isaac F. Marcossen, *An African Adventure*, pp. 196–7.
[2] Mungo Park, *Travels*, pp. 456–7.
[3] H. Barth, *Travels and Discoveries in North and Central Africa*, II, 55–6.

> site amount in wire, upon which he handed over cloth to Mohammed ibn Salib, who in return gave Syde ibn Habib's agent the wished-for ivory, then he allowed me to have the boat." [1]

Certain tribes seemed to have passed beyond the crude stage of barter and to have adopted a common medium of exchange which served within the tribe, sometimes within a larger radius. Salt in bars of definite size constituted money on the West Coast of Africa;[2] rock-salt cut into bars of eight or nine inches in length and an inch thick, taken from a deposit in the Quissama country, served the same purpose not only on the river but far in the interior.[3] The Latoukas preferred salt currency. So common was salt as a means of exchange in Africa that the expression, "a salt-eater," was used to designate a rich man.[4] Letourneau compares salt to our gold coin, and the cowrie shell, used so much as a medium of exchange to our subsidiary coinage.[5]

In spite of the fact that we can point to numerous commodities used as money, there is no evidence of any African people, in the absence of European influence, attaining to a currency or legal medium of payment for obligations of every kind and extent. It is rather the rule that the various species of money remain in concurrent circulation, and often obligations can be paid only in certain kinds.[6]

Park describes the influence of European contact in developing a common medium of exchange in Gambia.

> "In their early intercourse with Europeans the article that attracted the most notice was iron. Its utility in forming the instruments of war and husbandry made it preferable to all others; and iron soon became the measure by which the value of all other commodities was ascertained. Thus a certain quantity of goods of whatever denomination appearing to be equal in value to a bar of iron, constituted in the trader's phraseology a bar of that particular merchandise."

Thus a bar of tobacco was twenty leaves, a bar of rum, one gallon of spirits. The English for their own convenience in course of time fixed a bar at two shillings sterling.[7] The bar thus became

[1] V. L. Cameron, *Across Africa*, p. 177.
[2] Lippert, *Kulturgeschichte der Menschheit*, I, 620.
[3] J. J. Monteiro, *Angola and the River Congo*, pp. 247–8.
[4] From *Annales de la propagation de la foi*, 1888.
[5] Ch. Letourneau, *L'évolution de la propriété*, pp. 468–9.
[6] Carl Bücher, *Industrial Evolution*, p. 69.
[7] Mungo Park, *Travels*, p. 39.

an imaginary circulating medium for both English and natives, but the price of any commodity in bars might vary upon different parts of the coast.[1]

In much the same way the " peça " or " long " was adopted as the unit of exchange between the river Congo and Ambriz. All produce except ivory was purchased or sold by this unit: for instance, six yards of the ordinary kinds of cotton cloth, such as unbleached calico, blue prints, cotton checks, were equal to a " long "; a yard and a half of blue or baize, five bottles of rum, five brass rods, one cotton umbrella, 3000 blue glass beads, three, six, eight, or twelve cotton handkerchiefs, according to size and quality, were severally equal to a " long "; while articles of greater value, such as kegs of powder, guns, and knives, were equivalent to two or more " longs " each.[2]

It is apparent from the above examples that commercial contact of native peoples with members of advanced races soon results in the adoption of some highly desired article as a medium of exchange and a measure of value, and that even where such an article no longer holds the popular esteem, the monetary system evolved therefrom tends to continue. The clumsiness and the handicaps of exchange by gift and barter become evident, and the advantages of a common denominator to express values is not lost upon the native mind. The tests are immediate, and the savage does not show his traditional conservatism in resisting an innovation which proves of such great help in satisfying his wants.

Another practice which owed its development more or less to the commercial contact of civilised traders and travellers with the blacks was the establishment of a system of public revenue which was based upon the chief's or in some cases the tribal right to interfere with goods or persons passing through native territory. This right or prerogative undoubtedly originated, as Spencer suggests, in the making of propitiatory gifts to the chief as an acknowledgment of inferiority. It was tribute exacted at infrequent intervals. In course of time the chief came to look upon tribute or propitiatory presents as his due, and where power was not lacking he did not hesitate to enforce the collection of his claims. This would naturally occur when the subject is at the native chief's mercy, either because he is exposing commodities for sale where they can readily be found and a share taken, or he is transferring them from one part of the territory to another

[1] John Howison, *Views of the Colonies*, I, 122.

[2] J. J. Monteiro, *Angola and the River Congo*, pp. 59-60.

and can easily be stopped and a portion seized, or where the merchant is bringing goods into the territory and it is not difficult for the chief to lay hands upon such merchandise.[1]

Before contact with the advanced races, commerce carried on by individual traders was relatively rare. There was rather an exchange of specialties group-wise. With the coming of the Arab and the white man conditions changed, for now the traders did not represent a neighbouring tribe of equal power, but straggling parties of whites or Arabs who were completely in the chief's power. Gifts offered to gain the chief's goodwill and to prevent complete confiscation of goods became the rule.[2] Thus we have a tariff or customs evolving as a consequence of contact.[3] The Bari tribe, whenever opportunity presented itself, demanded beads or other goods of traders' parties as a tax for the right of passing through the country.[4] The order of questions asked by the Zulu chief Dingaan to the missionary or trader was usually: first as to his health, then as to his purpose in travelling in those regions, and finally, what gifts he brought.[5] Baker was forced to pay tribute or tax to Legge, the chief of Ellyria, for passing through his country. The chief inspected the traveller's luggage and then demanded fifteen heavy copper bracelets and a large quantity of beads.[6] It was the custom of the Masai to exact "hongo" or tribute from any person passing through their territory, the amount being assessed by themselves. This tax was supposed to ensure the payer from molestation by the Masai either within or without their territory.[7]

In some regions favourably situated the native princes were every ready to invent pretexts for increasing the tariffs or customs levied by them. Sometimes, if their demands were not complied with, they would shut up the passes of the country and altogether prevent any traffic with the interior, a measure which, if long persisted in, generally proved ruinous to the factories on the coast. Frequently, when this newly-found revenue proved inadequate, chiefs would purposely foment quarrels with European residents for the sole purpose of forcing them to purchase a reconciliation by presents, especially if a number of foreign nations possessed establishments in their country; in this case they would be

[1] H. Spencer, *Principles of Sociology*, II, 564–6.
[2] C. Bücher, *Industrial Evolution*, pp. 79–80.
[3] Ch. Letourneau, *L'évolution du commerce*, p. 84.
[4] S. W. Baker, *The Albert Nyanza or the Great Basin of the Nile*, pp. 63–4.
[5] F. Ratzel, *Völkerkunde*, II, 119.
[6] S. W. Baker, *The Albert Nyanza*, pp. 119–20.
[7] H. A. Wilson, *A British Borderland*, pp. 262–3.

encouraged to act in this manner, for if they quarrelled with one they had no difficulty in opening a trade with the neighbour on equally advantageous terms.[1]

Livingstone gives us a different angle on the development of customs and fines for passage. He points out that in many regions the aborigines were unacquainted with any traders other than those engaged in purchasing slaves, and that the traders were always at the mercy of the chiefs through whose country they were passing. The chief, if he desired, could give asylum to the captive slaves and strip the traders of their property. Consequently, the latter were obliged to curry favour with the chiefs and purchase a safe-conduct from them, and this became customary. Livingstone further shows the connection between the slave trade and fines for passage when he points out that in regions exempt from the slave trade the aborigines never thought of demanding fees for merely passing through the country; they claimed no ownership in land not needed for pasturage or tillage.[2]

Thus we find contact with the white races has been largely responsible for the development of modern commercial practices among the natives of Africa. Commerce, in our sense of the word, scarcely existed before the coming of the white man. Practically all the native tribes were acquainted with trade in some form or other, but the methods of exchange were of the most elementary form. Commercial intercourse has tended to sharpen the native concept of value. Thus among those peoples not coming in frequent contact with Europeans and Arabs, differences in place or of time do not seem to affect the valuation which they place upon their products; they will ask the same price when the market is glutted as prevailed when there was great scarcity, and they will travel long distances at considerable cost of time and energy to save a small sum on their purchases.

Furthermore, contact with races of a superior culture introduced the native African to the need, and to the advantages, of a money economy as a medium of exchange and a measure of value. Likewise, the presence of isolated Arab and European traders, more or less at the mercy of African chieftains, offered special opportunities to crystallise the idea of customs on goods and fines for right of passage as a means of public revenue for the chief or tribe.

E. E. Muntz

New York University.

[1] John Howison, *Views of the Colonies*, I, 110–11.

[2] D. Livingstone, *Travels and Researches in Africa*, pp. 379–80.

SOME FEATURES OF PRIMITIVE INDUSTRY[1]

It is often imagined that in the life of savage people there are no economic facts worthy of study. Native industry, however attractive to the anthropologist by reason of its primitive technical processes, has been regarded as achieving its ends by such simple organisation that it really offers no field of research to the economist. But the economic adjustment of the native to his surroundings is a complex matter, and an intricate cultural mechanism is required to obtain the satisfaction of even the most primary of material wants. What follows is an outline of a few of the salient features of Maori industry, indicating some of the factors by which work is controlled, as well as the influence of magical beliefs, the idea of duty to the community, and the amount of care and discrimination exercised by the native in providing for his future needs. The concrete information here embodied as a basis for the theoretical conclusions has been largely drawn from the general ethnographical writings of such authorities as Colenso, Gudgeon and Best, but part has been personally collected from Maori informants.

The Maori of New Zealand worked in what may be called a village economy. All members of the village group, who in general were related by kinship ties of common descent, and were members of the same sub-tribe (*hapū*), co-operated in the labour necessary for the satisfaction of their wants. Division of labour obtained to a limited extent. The tasks of men and women were differentiated, but there was not much specialisation in individual employments. Nearly every man was a fisherman, a fowler, a tiller of the soil, a collector of forest foods, a maker of tools, weapons, nets, cordage and ornaments, something of a builder, and probably a carver in wood and bone as well. Naturally, however, he often had a preference for one of these, and made himself particularly expert at it, though still continuing to practise all the others. In such a state of society exchange

[1] This paper embodies a few preliminary results of research-work in primitive economics, conducted at the London School of Economics and Political Science (University of London).

played no large part in the economic scheme. Certain real specialists, such as the tattooer, the carver, or the *tohunga* (priestly adept), did receive remuneration of food, garments, or ornaments in return for the exercise of their skill, but such was always made in the form of a gift. In the same way the exchange of products between coastal and inland tribes, such as fish and edible seaweed for birds or fresh-water crayfish, was always a matter of ceremonial exchange of gifts. A hint was dropped, in cases of doubt as to the object preferred, by expressing admiration for its fine qualities. No form of bargaining or haggling ever obtained; it would be quite repugnant to the Maori feeling of what was *tika* (etiquette; " correct "). In the case of an inadequate return for a gift, nothing was said at the time in the presence of the donors, but it would be freely and widely commented on later, to their great shame and the detriment of their reputation among the tribe; hospitality and generosity were ever the two prime virtues in Maori society. In all such matters the power of public opinion was very efficacious in stimulating the lagging one, and was, in fact, a definite social force, functioning as a determinant of economic action. The actual mechanism by which the ceremonial exchange of gifts was effected was somewhat complex; similarly intricate organisation operated in the sphere of distribution as regards the apportionment and ownership of goods.

The grouping of the Maori for economic purposes in *whanau* (*Grosfamilie*), *kainga* (village) or *hapū* (sub-tribe) was facilitated by the strong sense of the power of the kinship tie, the descent from a common ancestor. In this way the chief, as lineal head of the group—the rest of the people being his *teina*, or relations through various junior lines of descent—naturally assumed his function as organiser of production, leader of industry, and director of the community in the economic sphere. This position was due, not to his wealth, but to his social status by birth.

This felt reality of kinship bonds was also intimately connected with the general phenomena of production and distribution. For one could have observed under the old Maori system several extremely interesting features of the communal organisation of industry, and I have noted relics of it even in these degenerate days. In former times the product of each man's labour, in certain branches of work, was not retained by him for his own private use. It was not handed over to his wife and children for family consumption; it was contributed to the common stock of the village. With all primitive peoples the most important

economic undertaking is the provision of food, and here, in this department of life which is so essential to existence, we find that the Maori had subordinated the claim of the individual in regard to the products of his labour, to that of the community. To take an example of which I have received the details from native friends—the disposal of a catch of fish or birds. When the season had been opened with proper ceremony, the men went off for the day, each to his own particular spot, where he had the right of operating line or net, bird spear or snare. On return, late in the afternoon, each man laid down his catch in a heap on the *marae*, the public square in the centre of the village, where it was viewed, appraised and commented on by the people, after which the operations of cooking and preserving were carried out, and the food was added to the communal larder of the village. From this it was taken out and consumed as occasion required. All meals were taken together on this *marae* and each person received a portion of food in a little freshly woven basket, but this portion had no relation to the individual's contribution to the food supply. All persons in the village shared the meal, and the only people who might receive any special treatment were the respected and highly sacred chiefs, and the *tohunga* (priests), who might get an extra tasty morsel in their baskets by virtue of their rank, prestige or social status. At Te Ngae in the Rotorua district there are at the present day stores of preserved food contributed as mentioned above, and owned neither by the chief nor any other individual, but held for village use. And even as each man adds his share to the common food supply according to his powers, so he assists in consuming it with the same impartiality. This working for the common good, though most conspicuous, perhaps, in the matter of food, was a widespread feature of Maori industry.[1]

The people engaged in communal work to quite a large extent. Houses were built, trees were felled, forest clearings were made, ground was broken up for cultivation, the *kumara* or sweet potato (*Ipomœa batatas*) was planted and harvested, eel-weirs and seine nets were constructed by the united labour

[1] Elsdon Best, touching incidentally on this point in several of his writings, has used the term "communistic" as signifying the general Maori economy. This does not seem to me to be strictly accurate, since it implies the absence of private property, an institution which definitely existed among the Maori; or that the former economic organisation of our Polynesian friends may have had close affinities with the present doctrine of Communism—another misleading notion. It is a question of terminology, since Mr. Best is well aware of the true nature of Maori institutions, but one that is worthy of note.

power of the members of the village, working in concert under the direction of the chief. To cope with an extra heavy piece of work, such as the hauling of a log on skids out of the forest to be hewn into a canoe or the ridge-pole of a huge meeting-house, the assistance of other villages or *hapū* (sub-tribes) was often summoned.

Still, many tasks were performed by the individual craftsman, who made and hafted his own stone adzes, shaped his own bird spears, pigeon troughs, fish-hooks, floats, sinkers, shell-fish dredges, his wooden cultivating tools, his greenstone neck and ear ornaments, and numerous other articles of common use. These, subject to the exercise of certain customary privileges of appropriation by his friends and relatives for offences committed by him, were his own private property.

The most general features of Maori industry have been indicated in brief compass, and attention may now be directed to a few points worthy of slight elaboration, in view of misconceptions in regard to these phenomena of primitive society.

Pleasure in Work

The Maori of old was endowed with much artistic taste and skill, even when judged by modern European standards, and showed great aptitude in the decoration, by means of incised or perforated carving, of all his objects of use and adornment. Of the more prominent examples of fine workmanship the *whare whakairo* (the carved house of superior type), the war canoe, and the *pataka* of the better class, huts for the storage and preservation of valuable personal property, were the most noted for their beautiful carving. These were prized possessions of chief and tribe. But the humbler implements of everyday use, the production capital of the ordinary workman, were also graved and ornamented likewise with some design, often of elaborate character, carved with stone chisel and wooden or bone mallet. The amount of such extra-economic work performed in pre-European days was enormous, and involved the expenditure of immense time and labour. The tools and implements were not necessarily improved for utilitarian purposes by this decoration; in some cases it appears that the manufacture of the tool has been carried beyond the point of greatest practical utility and service, as in the case of some polished stone adzes in my possession, where the work of finishing has been carried even to the butt or poll, which, being thus smoothed, offers a less efficient grip to the lashing

which has to bind it to the haft. Here the production of an æsthetically pleasing implement has resulted in a slight but positive disutility in regard to the purpose for which it was primarily made. But apart from such instances, it is still obvious that the labour expended in finishing the tool was often carried far beyond the point at which it was compensated by any proportionate increase in the utility of the tool to serve its manifest purpose. Nor could the craftsman recoup the extra expenditure of his labour in another way, by disposing of the implement to some other man, and receiving from him an equivalent amount of goods for its enhanced value. For, as already stated, a fully-equipped system of division of labour and specialisation of employments did not obtain among the Maori, and such exchange as existed was therefore largely an inter-tribal affair, being confined mainly to the transfer of local for non-local goods, and reciprocal gifts of ceremonial objects. Generally speaking, tools and implements were not made or ornamented for exchange. From this it follows that the careful application of extra effort, skill and finesse, though resulting in utility (in the economic sense of satisfaction of desire) to the craftsman, yet involves the creation of no further exchange value. As we know from the natives themselves, desire for gain was not the impelling psychological factor in this additional labour performed on their implements.

The reason for this extra-economic activity, if it may be so termed, was complex: it was in part the desire of the native artisan to complete an article which he felt to be a worthy product of his skill, it was partly his wish to earn the commendation of his fellow-workers and the rest of the village for his ability, but it was mainly his love of the work itself and his pleasure in manipulating his tools. This pleasure in work for its own sake, irrespective of any benefit which might accrue, though especially noticeable in the sphere of carving, was a constant characteristic of other types of Maori industry. It is an element which must be taken into account before any facile generalisations are made about the economic motives of the savage.

Magic and Work

The *tohunga*, or priestly expert, versed in charms, incantations and sacerdotal lore, was the leader and adviser in religious and magical affairs, and it is not always realised how deeply Maori industry—or all primitive economics for that matter—was permeated with these magical ideas and ceremonial performances.

As a brief illustration of how magic entered into an occupation we can refer to Elsdon Best's account of the initiation of a girl into the full knowledge of the arts of weaving—an event of great moment to a Maori maiden of former days, by reason of the importance of weaving in the household economy.[1] In all such initiations the first task of the priest was to recite an incantation to render the pupil clear-headed, and to endow her with a receptive mind, a retentive memory, and ability to grasp the new knowledge. The pupil was seated before her *turuturu* (weaving sticks), and before her were displayed garments of different types and of fine design, with borders of coloured fibre, woven by a skilled hand. These were present to serve as a model to the girl—not for actual design but for fine and neat workmanship. She then took in her hand some prepared fibre and held it while the priest repeated a *karakia*, an incantation to fix firmly the new-found knowledge in her mind. As this was finished the pupil stooped forward and bit the upper part of the right-hand weaving stick, which was *tapu* (sacred). Then with the prepared fibre that she had been holding she wove the first and sacred weft across the frame. Having now entered upon her career as a weaver, she commenced to make her first garment. Afterwards the *whakanoa* ceremony to remove the sacredness of the initial rite was performed, involving the repetition of another spell and the ritual tasting of certain food.

While the above ceremonies and the first piece of weaving were being carried out the pupil was not allowed to partake of any ordinary food, to enter a place where food was cooking, or to associate with the rest of her family in any way. And even when her initiation was complete, the regulations of magic did not desert the weaver. Certain precautions must be always observed. Even to-day women will never eat in the same house as their work without covering it up. If a stranger comes when a woman is making a garment, the weaving sticks are at once loosened and the work covered up and laid aside. Even if a close relative comes into the house the work is momentarily ceased and the right-hand stick inclined across the work until the visitor is seated. If anyone should go round to the back of the work on the side opposite the weaver and examine it, that is an *aroakapa*, a bad omen. Moreover, it is an evil omen for the weaver to leave an *aho* (a weft) uncompleted at sundown, when she leaves off work; it should be carried right out to the margin

[1] Best, "Art of the Whare Pora: Notes on Clothing of the Ancient Maori," etc., *Transactions New Zealand Institute*, Vol. XXXI, 1898, pp. 627–632.

of the garment. If not, it is believed that the powers of concentration and memory of the weaver will forsake her and she will never be able to finish that garment. Te Rangihiroa (Dr. Buck), our greatest authority on weaving, suggests an economic explanation for certain of these omens. To continue with the weaving when strangers were present, or to leave a garment still set up and uncovered, would allow others to study pattern and method and to imitate the work. Hence a weaver with a reputation for excellent technique or fine patterns would soon lose it through the copying by others. And in the case of the uncompleted weft, the structure of the work was such that it easily became unravelled, to the detriment of the garment in preparation.[1] Hence, perhaps unconsciously, a utilitarian precaution was erected into an omen, and common sense reinforced by magical regulation.

In production of all kinds magic entered to an extraordinary extent. Spells were used by men in fowling, fishing, carving and tattooing, by house and canoe architects to give them success in their work, and some of the ritual was of a most complicated and sacred nature. In fact, no economic undertaking could be entered upon without its magical accompaniments. The omission of these in Maori eyes spelt certain disaster to the enterprise, just as much as if some important practical operation had been neglected. The two aspects of an undertaking, esoteric rite and practical work, clearly differentiated in the native mind, were yet complementary—proper use of each, on the lines laid down by custom and tradition, was the only road to material prosperity.

The question then arises, what is the relation of this magic to any actual economic performance? Though one be not well enough endowed with faith to believe with the Maori that great virtue emanates from the incantation, yet it cannot be denied that the magical ceremony does definitely influence the conditions of the phenomena, and has an actual, though indirect, economic function. In the case of the ceremonies at the initiation of the weaver, the recitation of the *karakia* (incantation) acts as a stimulus to her faculties. She firmly believes as the words fall from the lips of the expert that the incantation is sharpening her powers of perception and retentiveness, strengthening her memory, giving her the ability to grasp what she is taught and to faithfully reproduce it. In consequence of her belief, by a natural psychological process, confidence comes to her, the fears

[1] Te Rangihiroa (P. H. Buck), *Journal Polynesian Society*, Vol. XXXIV, No. 1 (March 1925), p. 85.

of making slips in her work or of forgetting the pattern are dissipated, and in consequence she proceeds with greater real aptitude for the task; her fingers tend to be more sure, and her technique to improve. The same is the case in the various food pursuits. In fish-spearing, in bird-snaring, in rat-trapping, or tree-climbing, belief in one's own powers is a requisite for the attainment of the object, and it is this necessary confidence and assurance in oneself that the various magical ceremonies provide and fortify.

Moreover, by their sacred character they may not be lightly disregarded, unless at risk of supernatural punishment. This impressive character of the rite tends to concentrate the full attention of the operator upon the matter in hand, with further good results from the economic point of view. The actual form of the ritual itself often aids in the same process. The correlation of certain objects, acts and postures with definite stages in the progress of the task is a general feature of all economic magic, and serves to focus the attention of persons upon the correct sequence of operations necessary to complete the work. Incidentally, it was a piece of rational, as well as magical psychology, to display pattern garments of first-class technique before the weaver at such a critical and impressionable period as was her time of initiation into the craft.

To sum up—the magic of production was not merely an excrescence upon the economic life of primitive man, but fulfilled a definite and most important function, in giving confidence to the workers, in acting as a stimulus to activity, and in helping to focus the attention of the craftsmen more assiduously upon their task. All this is of advantage to production from the purely economic point of view.

Forethought and Saving

Primitive man, having no opportunity to speak for himself, has been rather badly handled by theorists who have had occasion to mention various aspects of his economic life. On the question of provision for future needs he is generally dismissed in one phrase—he has "no foresight."[1] Consideration of Maori

[1] As an example of statements made by even the most eminent of economic authorities, I quote from Professor C. Gide: He speaks of our civilised tendency, "à nous préoccuper sans cesse de l'avenir," and continues, "Mais c'est là un effort intellectuel inaccessible au sauvage, qui n'a conscience que du besoin qui le presse et qui, suivant l'expression célèbre de Montesquieu, coupe l'arbre au pied pour avoir le fruit."—*Principes d'Economie Politique*, 10me éd., 1906, p. 632 (also in 23me éd., 1921)

society reveals that, relative to the means at his command, he exercises quite considerable care and forethought, amounting at times to actual voluntary abstinence, in attempting to make more sure his material future prospects.

I select from many examples that of the preservation of food for future use. In securing any of the main kinds of food it was always the object of the native to obtain as much of a surplus as possible, over and above the quantity required for immediate needs. It was not always managed, but at the digging of the fern root, the snaring of birds and of the little frugivorous rat, a surplus was always looked for, while a sufficient quantity of seed tubers of the *kumara* (sweet potato) was always planted to yield under normal conditions a harvest ample enough to form the staple of diet for the whole succeeding year. A surplus of any food was never wasted but always carefully preserved for future use, and each kind had its own well-recognised mode of treatment to best ward off decay. *Kumara* were stored in underground pits, a warm sunny day being chosen to avoid damp and mould, while each tuber was delicately handled to avoid bruising, since it was only with the utmost precaution that a stock of this—the basic food—would last from one season to the next. Fern root, fish, sharks, crayfish, shellfish, were all dried, each by a special method, and would last so for a long period, while rats and birds of a dozen species were potted in calabashes or kelp vessels and preserved in their own fat. These reserve stocks of food were drawn on as occasion required, some being used for ordinary daily consumption, others for the entertainment of visitors, and others as gifts or in a kind of primitive exchange of goods for services.

Again, a rigid prohibition was imposed on the taking of birds in the nesting time; a kind of "close season" was proclaimed, and punishment was inflicted upon anyone who broke this rule, which was enforced by magical means. This protection of the birds was a deliberate effort to conserve the available food supply by restriction of present consumption, in order to ensure reasonable prospects of future abundance. Despite periodical outbursts of extravagance and waste of wealth, as at native feasts, it is plain from these instances given that relative always to his cultural circumstances, primitive man is not lacking in forethought, but endeavours by constant, well-defined and practical efforts to provide for future needs.

Under certain circumstances the native was even capable of real saving—understanding by this the restriction of the satis-

faction of wants in such manner that the existing stock of capital is not merely replenished but actually augmented. When the chief, out of the stores of food which accrued to him in various ways (by the work of himself, his wives and slaves, and by tribute), diverted a portion to maintaining and rewarding some adze-men and carvers, who were thereby induced to hew out a canoe, he made an actual addition to the capital of the community and one which could be later utilised for further production.

A note in conclusion. The study of primitive economics should need no justification. But it may not be superfluous to point out that the investigation of the structure and working of native industrial organisation is of value in reference to the much-discussed problem of the decay of native races upon contact with the white man. To the disruption of the former native culture, with which is associated the breakdown of his former economic system, with its complex, often cumbrous mechanism, is to be attributed much of their decline. A closer study of the problems of primitive economics would reveal how—to mention but a few causes which have deeply affected the Maori—the lessening of the authority of chiefs (involving a dislocation of the mechanism of distribution), the suppression of polygamy and of all forms of slave labour, the discountenancing of every kind of magic, and the dissolution of communal ownership are tending to destroy some of the foundations of the economic organisation of the native, and so to weaken his resistance to the new forces which assail him.

RAYMOND FIRTH

THE DEVELOPMENT OF RUSKIN'S VIEWS ON INTEREST

Shylock hated Antonio mainly

> " . . . . . for that in low simplicity
> He lends out money gratis, and brings down
> The rate of usance here with us in Venice.
> . . . . . and he rails
> Even there where merchants most do congregate,
> On me, my bargains, and my well-won thrift,
> Which he calls interest."

Apparently in Shakespeare's time the term " interest " conveyed an insinuation of malpractice not connoted sufficiently by the word " usury." " Unto a stranger thou mayest lend upon usury; but unto thy brother thou shalt not lend upon usury," is the law of Deuteronomy (xxiii. 19). The Christian Church condemned all usury and practically made no distinction between interest on alleged equitable moderate terms and any other kind of interest. " Now," says Professor Nicholson, " the man who does not in some shape or other lend his capital upon ' usury ' is, in the modern world, generally considered as lacking in his duty to himself or his family."

No thought of any radical iniquity in charging " a rate of usance " to strangers had occurred to Ruskin when he began to write on Political Economy. His *Unto This Last* scarcely touches the subject of interest at all, and in his *Munera Pulveris*, written in 1862–3, he definitely states that " Usury merely means taking an exorbitant sum for the use of anything," and goes on to point out that " it is no matter whether the exorbitance is on loan or exchange, on rent or on price." Nevertheless the crack in the raft on which he is sailing is already apparent when he says, " such gain as is dependent on keeping the exchangers ignorant of the exchange value of the articles, or on taking advantage of the buyer's need and the seller's poverty, is one of the essential and quite the most fatal forms of usury; . . . the essence of the usury being that it is obtained by advantage of opportunity or necessity and not as due reward for labour." In this volume, also, the baseness of demanding interest on war loans is already

emphasised, and he wonders how it is "that ever men should have come to value their money so much more than their lives, that if you call upon them to become soldiers and take chance of a bullet through their heart and of wife and children being left desolate, for their pride's sake they will do it gaily without thinking twice; but if you ask them for their country's sake to spend a hundred pounds without security of getting back a hundred and five, they will laugh in your face."

In a note to the last chapter of *Munera Pulveris*, published in *Fraser's* in 1863, Ruskin says, "I have not hitherto touched on the subject of interest of money; it is too complex and must be reserved for its proper place in the body of the work. The definition of interest (apart from compensation for risk) is 'the exponent of the comfort of accomplished labour, separated from its power'; the power being what is lent: and the French economists who have maintained the entire illegality of interest are wrong; yet by no means so curiously or wildly wrong as the English and French ones opposed to them, whose opinions have been collected by Dr. Whewell at page 41 of his *Lectures;* it never seeming to occur to the mind of the compiler, any more than to the writers whom he quotes, that it is quite possible, and even (according to Jewish proverb) prudent, for men to hoard as ants and mice do, for use, not usury; and lay by something for winter nights in the expectation of rather sharing than lending the scrapings."

In January 1864 Ruskin's father died. To his wife he bequeathed £37,000, of which £15,000 was Bank Stock, and the house at Denmark Hill for life; to his son £120,000, of which £40,000 were in stocks, his leases at Herne Hill and Denmark Hill, his freehold pottery at Greenwich and his pictures, then estimated by him as worth £10,000. Thirteen years afterwards Ruskin told his readers what he did with the money. Only one paragraph of his statement need be quoted here.

"My first performance was the investment of fifty thousand pounds in 'entirely safe' mortgages, which gave me five per cent. instead of three. I very soon, however, perceived it to be no less desirable, than difficult, to get quit of these 'entirely safe' mortgages. The last of them that was worth anything came conveniently in, last year. I lost about twenty thousand pounds on them altogether."

He says nothing elsewhere on the subject of mortgages, but anyone who realises that the safety in a mortgage investment lies in the power of foreclosure will understand that the effect of

this experience on Ruskin must have been like the proverbial "continual dropping on a very rainy day," in a wet weather climate.

In January 1865, in a lecture to a Working Men's Institute (afterwards published as one of *Three Lectures on Work, Traffic and War*, under the title of *The Crown of Wild Olive*), we have evidence of the kind of cynicism which arises from the cynic's criticism of his own actions. "We do great injustice to Iscariot," says Ruskin, "in thinking him wicked above all common wickedness. He was only a common money-lover. . . . He was horror-struck when he found that Christ would be killed; threw his money away instantly, and hanged himself. How many of our present money-seekers, think you, would have the grace to hang themselves, whoever was killed? . . . Judas had seen (Christ) do miracles, thought He was quite strong enough to shift for Himself, and he, Judas, might as well make his own little bye-perquisites out of the affair. Christ would come out of it well enough, and he have his thirty pieces. Now that is the money-seeker's idea, all over the world." A little further on he comes almost accidentally to the truth which eventually had the most weight with him, "for borrowers are nearly always ill-spenders, and it is with lent money that all evil is mainly done, and all unjust war protracted."

Six years later, in January 1871, he began the series of Letters entitled *Fors Clavigera* and started the practice of self-flagellation at once. "If all the money of all the capitalists in the whole world were destroyed, the notes and bills burnt, the gold irrecoverably buried, and all the machines and apparatus of manufactures crushed . . . in one catastrophe; and nothing remained but the land with its animals and vegetables, and buildings for shelter,—the poorer population would be very little worse off. . . . It is only we who had the capital who would suffer; we should not be able to live idle as we do now, and many of us—I for instance—should starve at once." But he goes on: "I will show you that our money is really likely to be useful to you in its accumulated form . . . so only that you are careful never to let us persuade you into borrowing it, and paying us interest for it." He reproduces "an amusing story" from what he henceforth calls the Cambridge Catechism. James has made a plane for himself which William desires to borrow; the dialogue ends as follows:

James.—"I made the plane for myself, and not for you. I expected to gain some advantage from it. I have made the plane

for the purpose of improving my work and my condition; if you merely return it to me in a year (*i.e.* a new plane) it is you who will gain the profit of it during the whole of that time. I am not bound to do you such a service without receiving anything in return. Therefore if you wish for my plane, besides the restoration already bargained for, you must give me a new plank as a compensation for the advantage of which I shall be deprived." (The story-teller proceeds):

"These terms were agreed to, but the singular part of it is, that at the end of the year, when the plane came into James's possession, he lent it again; recovered it, and lent it a third and fourth time. It has passed into the hands of his son, who still lends it. Let us examine this little story. The plane is the symbol of all capital, and the plank is the symbol of all interest."

Ruskin abridges the story: "James makes a plane, lends it to William on 1st January for a year. William gives him a plank for the loan of it, wears it out, and makes another for James which he gives him on 31st December. On 1st January he again borrows the new one, and the arrangement is repeated continuously. The position of William therefore is, that he makes a plane every 31st of December; lends it to James till the next day, and pays James a plank annually for the privilege of lending it him on that evening. This in future investigations of capital and interest we will call, if you please, 'The Position of William.'"

Three months later he writes: "In this present April, I am so much a fool as not even to know clearly whether I have got any money or not. I know indeed that things go on at present as if I had; but it seems to me that there must be a mistake somewhere and that some day it will be found out. For instance, I have seven thousand pounds in what we call the Funds or Founded things; but I am not comfortable about the Founding of them. . . . All that I know of them is that this bit of paper gives me a right to tax you every year, and make you pay me two hundred pounds out of your wages; which is very pleasant for me, but how long will you be pleased to do so? Suppose it should occur to you, any summer's day, that you had better not? Where would my seven thousand pounds be? In fact, where are they now? We call ourselves a rich people; but you see this seven thousand pounds of mine has no real existence;—it only means that you, the workers, are poorer by two hundred pounds a year than you would be if I hadn't got it." He examines his other sources of income and concludes: "Whenever I examine into these possessions I find they melt into one or another form

of future taxation and that I am always sitting (if I were working I shouldn't mind, but I am only sitting) at the receipt of custom, and a Publican as well as a sinner."

In August 1871 he writes: "All France, it seems, is in a state of enthusiastic delight and pride at the unexpected facility with which she has got into debt. . . . Everybody in France who has got any money is eager to lend it to M. Thiers at five per cent. . . . First you spend eighty millions of money in fireworks, doing no end of damage in letting them off. Then you borrow money, to pay the firework-maker's bill, from any gain-loving persons who have got it. And then, dressing your bailiff's men in new red coats and cocked hats, you send them drumming and trumpeting into the fields, to take the peasants by the throat, and make them pay the interest on what you have borrowed; and the expense of the cocked hats besides. That is 'financiering,' my friends."

Ruskin's mother died at the end of this year, leaving her son all that she possessed, the capital she had inherited, apparently, being untouched since the death of her husband nearly seven years before. In the light cast by his own income, Ruskin in June 1872 examines Fawcett's Manual (1869) with reference to interest. Interest, said Fawcett, consists of three distinct parts: (1) Reward for abstinence, (2) Compensation for the risk of loss, and (3) Wages for the labour of superintendence. Reversing the order, Ruskin sweeps away the third and second parts. "I have at this moment," he says, "£15,000 of Bank Stock and receive £1,200 odd, a year, from the Bank, but I have never received the slightest intimation from the directors that they wished for my assistance in the superintendence of that establishment;—(more shame for them). . . . Your business is to choose and pay your superintendent for his sense and not for his money.

"Next, by compensation for risk, does Mr. Fawcett mean protection from it, or reward for running it? Every business involves a certain quantity of risk, which is properly covered by every prudent merchant, but he does not expect to make a profit out of his risks, nor calculate on a percentage on his insurance. Does Professor Fawcett mean . . . that while the definition of the first part of interest is extra payment for prudence, the definition of the second part of interest is extra payment for imprudence? . . . So far from receiving my dividend as compensation for risk, I put my money into the bank because I thought it exactly the safest place to put it in. But nobody can be more anxious than I to find it proper that I should have £1,200 a year. Finding

two of Mr. Fawcett's reasons fail me utterly, I cling with tenacity to the third, and hope the best from it. . . .

" My £1,200 then are given me as ' the reward of abstinence.' It strikes me upon this, that if I had not my £15,000 of Bank Stock I should be a good deal more abstinent than I am, and that nobody would then talk of rewarding me for it. . . ."

And Ruskin ends: " *Not* a cake and a quarter to-morrow, dunce, however abstinent you are—only the cake you have—if the mice don't get at it in the night."

Three months later we learn that an impatient correspondent, Mr. W. C. Sillar, who has long been hotly engaged in testifying publicly against the wickedness of taking interest, has written to Ruskin to complain that all he says is mysterious, that he is bound to speak plainly, and above everything, if he thinks taking interest sinful, not to hold Bank Stock.

" Once for all, then," says Ruskin, " Mr. Sillar is wholly right as to the abstract fact that lending for gain is sinful . . . and . . . I take the interest of Bank Stock, because though taking interest is, in the abstract, as wrong as war, the entire fabric of society is at present so connected with both usury and war, that it is not possible violently to withdraw, nor wisely to set example of withdrawing, from either evil. . . . ' Ananias over again, or worse,' Mr. Sillar will probably exclaim when he reads this, and invoke lightning against me."

Ruskin had already appended a note to his *Munera Pulveris* (published in volume form in 1872) giving his adhesion to Mr. Sillar's views that payment of interest of any amount whatever is real " usury " and entirely unjustifiable. But although he had collected much combustible material towards the destruction of interest, his conscience failed to supply the necessary fire. He knew that he could have made out a much better case for the " fair rate " than Fawcett had done, and was perhaps still inclined to believe that it had its place in honest business transactions. A burning flame of indignation took possession of him, however, when, on a visit to Rome, he found that the slope of the Aventine, under the wall of Tullius, opposite the farm of Cincinnatus, had just been sold on building leases to a company. " Now this anonymous society," he writes, " which is about to occupy itself in rebuilding Rome, is, of course, composed of persons who know nothing whatever about building. They also care about it as little as they know; but they take to building because they expect to get interest for their money by such operation. Some of them, doubtless, are benevolent persons, who expect to

benefit Italy by building, and think that, the more the benefit, the larger will be the dividend. . . . But observe in what its dividends will consist." For Ruskin's detailed account of what these builders would do may be substituted Mr. Stillman's account written fifteen years later of what they did do. "The greater part of the new city is composed of great stucco apartment-palaces with dividing walls that hardly serve for privacy, huge tenement houses so flimsy in construction that several of them have fallen into the street in the process." "Of such architecture," continues Ruskin, "the anonymous society will produce the most it can; and lease it at the highest rents it can; and advertise and extend itself so as, if possible, at last to rebuild, after its manner, all the great cities of Italy. . . . But of course all our great building work is now carried on in the same way; nor will any architecture, properly so called, be now possible for many years in Europe. For true architecture is a thing which puts its builders to cost—not which pays them dividends. If a society chose to organise itself to build the most beautiful houses, and the strongest that it could, either for art's sake, or love's—either palaces for itself, or houses for the poor—such a society would build something worth looking at, but not get dividends."

From this time forward Ruskin ceased to be half-hearted. According to his definition, "Usury is properly the taking of money for the loan or use of anything (over and above what pays for wear and tear), such use involving no care or labour on the part of the lender."

"It is enough to show the especial and subtle evil of usury, to reflect on the general fact in human nature, that while we won't give anybody half a crown without asking what he wants with it, we will lend him any quantity of millions to commit murder with, or do what else he likes."

"The principle of Righteous dealings is, that if the good costs you nothing, you must not be paid for doing it. Your friend passes your door on an unexpectedly wet day, unprovided for the occasion. You have the choice of three benevolences to him—lending him your umbrella—lending him eighteen-pence to pay for a cab—or letting him stay in your parlour till the rain is over. If you charge him interest on your umbrella, it is profit on capital—if you charge him interest on the eighteen-pence, it is ordinary usury—if you charge him interest on the parlour, it is rent. All three are equally forbidden by Christian law, being actually worse, because more plausible and hypocritical sins than if you at once plainly refused your friend shelter, umbrella or

pence. You feel yourself to be a brute in the one case, and may some day repent into grace; in the other you imagine yourself an honest and amiable person, rewarded by Heaven for your Charity; and the whole frame of society becomes rotten to its core."

Two years later Ruskin believes his failure to secure allegiance to his St. George's Society, except from a little group of men and women, to be due to his voice on interest having an uncertain sound, "because I have not yet given myself to it wholly, but have halted between good and evil, and sit still at the receipt of custom, and am always looking back from the plough." He goes on supplying weapons for his readers against himself by quotations from the works of the Sillar brothers and others. A year later R. G. Sillar writes that his former business as a banker and bullion broker is sealed to him as iniquitous, but he cannot make out what Ruskin wants him to do, and explains the impossibility of his waiting much longer for the plans of St. George's Society to mature. Ruskin publishes all these reproachful letters, and in 1876 gives a monthly account of his personal expenditure with commentaries. "How we usurers are to live, with the hope of our gains gone, is precisely the old temple of Diana question. . . . And there are many amiable persons who will not directly see their way, any more than I do myself, to an honest life; only let us be sure that this we are leading now is a dishonest one." And later: "I am a little ashamed of my accounts this time, having bought a missal worth £320 for myself, and only given one worth £50 to Sheffield. I might state several reasons, more or less excusing this selfishness, such as, etc.—but I must beg my severely judging readers in the meantime rather to look at what I have done than at what I have left undone, of the things I ask others to do." He publishes the earnest wish of an American Quaker, Mr. Rushmere,[1] that "Mr. Ruskin could feel it his duty to act promptly in withdrawing his money from usury," and for the first time points out to "those religious gentlemen who have had the goodness to concern themselves about his inconsistency," that while the arrangement they propose would be a release to himself, it would be an exceedingly inconvenient one to a number of persons at present dependent on him for daily bread, who, not sharing his views about Interest, would have no consolation in their martyrdom.

At last, in the spring of 1877, he informs his "fellow-workmen

[1] Mr. Rushmere enclosed 3*s*. for Sillar's pamphlets and "took pleasure in the thought that the payment, though trifling, goes to St. George's Fund."

and labourers of Great Britain" what he has done with the fortune he inherited and what he proposes to do. He averages his expenditure at £5,500 a year for thirteen years, assigning £70,000 therefore to "yearly spending," £20,000 to loss on mortgages, £17,000 as gift to relations, £15,000 to loss to relations, £15,000 to what he calls "harness and stable expenses," which include the purchase of Brantwood, the repairing of its house and the building of a lodge, the furnishing of his rooms, etc., at Oxford, and the purchase of pictures, and £14,000 in gifts to St. George and Oxford, making altogether £151,000.

On 1st April, 1877, he possessed—

In funded cash, six thousand Bank Stock, worth about £15,000.
Brantwood, worth with house and furniture, £5,000.
Marylebone freehold and leaseholds, £3,500.
Greenwich freehold, £1,200.
Herne Hill leases and other little holdings, £1,300.
Pictures and books insured for £30,000, worth at least double.

"Gathering the wrecks of me together, I could still now retire to a mossy hermitage on a little property of fifty-four thousand odd pounds; more than enough to find me in meal and cresses," says Ruskin. He proceeded to dispose of it.

The Marylebone property was assigned to the St. George's Company. Ruskin had already had the value of it back in interest and had no business to keep it any more.

Brantwood he retained, with its servants, all necessary to keep it in good order and to keep him comfortable and fit for his work.

The Herne Hill leases and little properties he made over to his cousin, Mrs. Severn, "she promising to keep his old nursery for him whenever he came to town."

He retained £3,000 to be spent that year "in amusing himself . . . at Venice and in the Alps and elsewhere."

His Bank Stock was to be sold and twelve thousand of Consol Stock purchased, which he says "will provide me with £360 a year, the proper degrees of the annual circle, according to my estimate, of a bachelor gentleman's proper income, on which if he cannot live he deserves speedily to die."

For his dependents and customary charities further provision had to be made, otherwise, he says, "Virtually I should then be giving away the lives of these people to St. George and not my

own." Although he had received no income at all for his literary work in the previous year, having spent £800 for printing his new books, he felt a confidence, amply verified, that if he would only stop working for the press, he could sufficiently maintain all his present servants and pensioners.

Lastly, his Oxford professorship was to provide for his expenses at Oxford as long as he was needed there.

Of course one of Ruskin's counsellors of perfection immediately wrote to ask why £360 from Consols was any less sinful than £1,200 from Bank Stock, especially as the former was interest on war loan. Ruskin, in handing over £7,000 Consols to the St. George's fund some years before, had remarked that "although the interest on consols is only the taxation on the British peasant continued since the Napoleon wars, still the little portion of his labour, the interest on our St. George's fund, will at last be saved for him, and brought back to him." Ruskin now replies to his correspondent. "All interest is usury; but there is a vital difference between the interest of an already contracted debt, and taking part in a business which consists in enabling new ones to be contracted. As a banker, I derange and corrupt the entire system of the commerce of the country; but as a stockholder I merely buy the right to tax it annually—which under present circumstances I am entirely content to do." His critic still felt worried. Ruskin had claimed to be "an outspoken and wholesome usurer; as a soldier is an outspoken and wholesome murderer." "Should you not," asks his correspondent, "rather live on your principal as long as it lasts?" Ruskin answers his critic's religious objections, and to the economic suggestion concludes: "So long as our national debt exists, it is well that the good Saint should buy as much stock of it as he can; and far better that he should take the interest already agreed for, and spend it in ways helpful to the nation, than at once remit it, so as to give more encouragement to the contraction of debt."

Throughout the whole of his examination of the morality of interest Ruskin was directing his attention to its economic effects. But he was not permitted to pursue this line of argument with his opponents. The editors of *Cornhill* and *Fraser's Magazine* had both been obliged to put an abrupt end to the publication of *Unto This Last* and *Munera Pulveris;* Professor Fawcett, personally challenged to reply to the criticism of his views, ignored the summons. The only people who came out into the open against him were the clergy. They said the Bible only forbade usury, not a fair rate of interest; that if usury had been

wrong in itself, the Bible would not have permitted Jews to lend upon usury to strangers; and whatever the Old Testament said, the New Testament imposed putting one's money in the bank at a rate of interest as a duty in the parable of the ten talents. Sometimes Ruskin replied ironically by supposing that the methods adopted by the fraudulent steward were also set up for imitation, or referred his correspondent to Mr. Sillar's pamphlets.

But the whole argument of the Churchmen claiming interest as of God against Ruskin as Devil's Advocate and of Ruskin against the Churchmen is to be found in his last public utterance on the subject, entitled *Usury: a Reply and a Rejoinder*, published in the *Contemporary Review*, February 1880, the Reply being by Dr. Fraser, Bishop of Manchester, and the Rejoinder by Ruskin. The Bishop privately treated the Rejoinder as the "ravings of a lunatic"—Ruskin had suffered his first mental breakdown two years before, so this judgment was readily accepted. Those who read it in the light of a previous knowledge of Ruskin's teachings on political economy, with the further aid of Sir E. T. Cook's notes on his references to Biblical writers and Plato's Laws, are justified in regarding it as superb in its irony and as carefully just in its reasoning. As Sir Edward Cook mildly remarks: "It was the premises which the Bishop had to destroy, and this was a task which would perhaps have presented some inconveniences. For the position to which Ruskin sought to pin down his antagonist, and from which the argument proceeds with ruthless exactitude, is the condemnation of 'usury' by the literal text of the Bible and by the authority of learned divines."

C. E. Collet

A FOURTEENTH-CENTURY TREATISE ON MONEY

In the 'sixties of the last century, when the late W. Roscher, Professor of Political Economy in the University of Leipzig, was engaged at the request of the Academy of Munich in researches on the history of Political Economy in Germany he came across a casual reference to a work by a certain Nicholas Oresme which he looked up merely in a perfunctory way, he tells us, and as an *opus supererogatorium*, but—" What was my surprise," he writes, " when I found before me a theory of money, elaborated in the fourteenth century, which remains perfectly correct to this day, in which the principles of the nineteenth century hold sway, and that with a brevity, precision, clearness and simplicity of language which proclaim aloud the superior genius of the author," whom he singles out as " the greatest scholastic economist." A fortunate chance put him on the track of this " precious stone buried in the dust," but his only merit consists in recognising " a diamond of the purest water, ignored for so many years." . . .

Roscher's appreciation of Oresme was read before the Institute of France in 1862 by Wolowski, to whom Oresme was not altogether unknown and who pronounced a panegyric of his own before the same society.

" A pupil of Aristotle," says Wolowski, " Nicholas Oresme has drawn from the great Greek Philosopher the doctrine of which he has been the enthusiastic interpreter. Aware by sad experience of the misfortunes following an alteration in the coinage, he has exposed its origin and real nature; he has defined the character and rôle of money with a clearness and force never since surpassed.

" When we consider the early epoch at which Oresme's work appeared, we hardly know whether to be more amazed at the vigour of the work or the oblivion into which his principles so clearly enunciated have fallen. It is not until the sixteenth century that we shall find them vindicated in Poland, Italy and France, and in the seventeenth century in England."

This high appreciation of Oresme's work has been amply endorsed by English-speaking economists. " No work extant," says Walker, "expresses more justly and strongly the pernicious

effects of that *morbus numericus* which wrought such misery among the peoples and caused such weakness in the Governments of Europe. . . . Oresme sets forth the principles of coinage and seigniorage with a precision nowhere surpassed" (*Money*, Pref., viii).

No further apology is needed for presenting readers of the ECONOMIC JOURNAL with a résumé of this celebrated work, which is all the more called for at the present time when so many unorthodox and revolutionary views on the subject of money are being foisted on the public. "The permanent hostility of the nations," says Wolowski in his study of Oresme, and his words are literally applicable to the present post-war situation, "commercial wars, alteration of the currency, disguised bankruptcies, assignats, paper money, a hatred of capital, chimerical schemes for financial rehabilitation, such is the sad outcome of false ideas on the subject of money."

Before we proceed to give an analysis of the work a few words on the author himself will not be out of place.

Nicholas Oresme was born in Normandy, apparently in the first quarter of the fourteenth century, about the time of the accession of the first kings of the House of Valois. Having obtained his Doctorate in Theology, he was appointed in 1355 Grand Master of the College of Navarre, where he had made his studies. He was promoted Archdeacon of Bayeux and Dean of the Chapter of Rouen, and is said to have been chosen in 1360 by King John (1350–1364) as tutor to his son, Charles V, but this is open to doubt. The year 1360 was the date of the Treaty of Bretigny, when King John was offered his liberty for a ransom of 3,000,000 gold pieces, but as he was unable to raise such a large sum in France he retired to captivity in England. His son, Charles, was at that time twenty-three years old and had been regent of France since the capture of his father at the battle of Poictiers in 1356. Be that as it may, Oresme was certainly the wise counsellor of the new king. In 1377 he was appointed thirty-third Bishop and nineteenth Count Bishop of Lisieux, where he died in 1382.

One of the most learned men of his day, he translated the *Ethics* and *Politics* and other works of Aristotle; wrote numerous sermons and theological works, and was commissioned by Charles V to translate the Bible into French.

The short French introduction to Oresme's Treatise, which is wanting in the Latin version, gives us a brief summary of the scope of the work. It is a "little Treatise on the First Invention

of Monies . . . to what end they were made; how they are to be made use of; to whom appertaineth the right to mint, debase or alter them, and what inconvenience follows therefrom. Compiled from several volumes to show the great abuses practised therein by the merchants and commonalty, abuses which Princes tolerate and suffer, and whence shall ensue divers irreparable damages if speedy remedy be not applied." . . .

Then follows a longer Prologue which notes that divers people maintain that "any King or Prince can of his own proper authority, right, or privilege alter the monies current in his kingdom and pass ordinance thereon at his own will and pleasure, and thereby reap profit and emolument." Such a monstrous privilege has, we know, been claimed by English sovereigns, notably the Tudors and Stuarts. "Nothing is more appropriate," says James I in the preamble to a Proclamation of Nov. 16, 1604, "to . . . princes than the ordering of their monies, and settling them at such prices and valuations as they shall think fit." . . . But as others deny to princes any such right or privileges, our author proposes to settle the question according to the principles of philosophy, and especially that of Aristotle, so that, a true decision having been arrived at, it may be put into practice to the benefit of king and people alike.

For at the present time, he says, everyone puts his own value on the coin of the realm, which is an insult to the prince whose figure it bears, and who, we may add, has vouched for its genuineness by allowing his image to be stamped thereon. "Nowadays the merchants have more ado to agree among themselves as to the price of money and its valuation than of the merchandise they deal in," and so the whole object of money is defeated, as it ought to be a fixed and invariable standard of value by which all sorts of variable values may be measured. "Whence gold and silver have reached so high a price that if a remedy be not speedily provided, divers baneful inconveniences are to be feared . . . such as the transportation of the specie, to wit, gold and silver, into neighbouring countries where their currency rate is higher . . . by the which outflow of specie the merchants would suffer loss in their goods and wares and would not have vent thereof in the said kingdom, thus drained of money; and again, what is worse, the changers and bankers who know where gold is current at the highest rate . . . do, by stealthy evasions, drain the country of its money and send it or sell it to merchants abroad, receiving from these other golden pieces compounded of base alloy with which they flood the country . . . and there is no

true footing or foundation on which one can calculate." These remarks may, *mutatis mutandis*, be applied to the depreciated currencies of our day, especially if for " base coin " we read " depreciated paper."

Next follow the headings of the twenty-six chapters of the work, of which the first seven are the most interesting and instructive. The first goes to the root of the matter and explains the origin and need of a circulating medium. The second and third treat of the most suitable materials for such. The fourth discusses its proper form and figure; the fifth, to whom belongs the right of coining; the sixth, to whom the money belongs when coined; the seventh, who should bear the expenses of coining, in other words, the question of seigniorage. The remaining nineteen chapters deal with the author's main thesis, the debasement of money, its rights and wrongs, and the various ways in which it is perpetrated; showing that it is worse than usury, is unjust to subjects and dishonourable and disadvantageous to the king himself; in fine, that it is an act of tyranny and that tyrannies cannot endure.

We shall now take a rapid glance at the first seven chapters as being the most important and suggestive. In the first, on the origin of money, he recalls the primitive state of barter (as economists have done from Aristotle to our own days), in which " one man abounded in sheep and was in need of bread, while the tiller of the soil had abundance of bread but was in need of cattle. Wherefore men began to traffic without money, and one gave the other a sheep for corn, while another gave his labour in exchange for bread or for wool. . . . But whereas in this manner of exchange and transport of goods many difficulties and disputes arose, ingenious men devised the use of money as an instrument for the mutual exchange of natural riches. . . . For monies are called artificial riches, seeing that . . . one may abound therein and yet die of hunger," as Aristotle and Ovid recount of King Midas.

Here we must join issue with our author and his master, Aristotle. Money is not to be called " artificial riches " simply because it does not immediately relieve human indigence or because man cannot eat it. Man cannot eat wool, cloth, timber, stone, iron, etc., and yet these things are rightly classed as wealth and riches. The error lies with those who regard money as synonymous with wealth, as being the only wealth. " For men," says Aristotle (*Politics*, I. ch. 9), " oftentimes suppose wealth to consist in the quantity of money which anyone

possesses . . . others, again, regard it as a mere trifle, as having no value by nature, but merely by arbitrary compact, so that if those who use it should alter their sentiments, it would be worthless, and unserviceable for any necessary purpose." Thus there are two opposing schools, one considering money as the sole wealth of man, the other regarding it as merely fictitious wealth, of merely conventional and no intrinsic value.

As " money is the instrument for exchanging natural riches " it should be " easily handled and light for carrying about," and hence should " be made of some precious and rare material, such as gold," if sufficient be found in the country; but if not it is also made of silver " (Chap. II.). " Again, it is not expedient for the body politic that such material should be too abundant, seeing that for this reason bronze money went out of use. Perchance also for this reason it has been disposed for the good of the human race that gold and silver, which are most suitable for this purpose, are not easily to be had in abundance." . . .

But " since it is expedient . . . to carry on sometimes a great and wholesale trade, sometimes a lesser, and most frequently a small trade or trade in small things . . . and since . . . the little piece of silver which should be fairly given for a pound of bread or such-like thing would not be palpable or easily handled on account of its excessive smallness, money was therefore made of some inferior material [in alloy] with silver, and thus black money (*nigra moneta*) had its origin, which is convenient for minute dealings " (Chap. III.). Such a mixture is not strictly a debasement, but it must never be made " unless through the necessity already alluded to . . . and for the common utility " for which money was invented.

Originally the metals were paid out by weight (Chap. IV.), but to prevent the trouble of constant weighing or assaying a stamp was put on them to guarantee that they were of " standard material and definite weight." Hence coins were originally and properly designated by their weight, or were synonymous with weights. A " penny " was a " penny-weight " of silver; a " pound " was a pound-weight of silver, coined or uncoined, and neither more nor less; but when coins were depreciated in weight and got fanciful names, *e.g.* " crowns," " nobles," " angels," etc., etc., people lost all sight of their legal and intrinsic value.

Coins " should be of a form and size easy of handling and counting, and of mintable material, easily stamped and retentive of the impression. And hence not every precious thing is apt for coining into money, for gems, lapis lazuli, pepper and such

like are not naturally suited for this purpose, but gold and silver are eminently so . . ." (Chap. V.).

In England and on the Continent in mediæval times, nobles of various degree, bishops and others obtained or assumed the privilege of minting money, and, owing to the unskilfulness of the minters or the inducement to profit by light weight, it is easy to imagine what monetary confusion must have been the result. Oresme is therefore right in insisting (Chap. V.) that " not everyone should be permitted to coin money or to impress a figure or image of this sort upon his own silver or gold," but that as money has been " instituted for the good of the community," the prince alone, " on behalf of the community, should have money stamped and coined with a suitable impression."

This does not mean (Chap. VI.) that " he is the lord or proprietor of the money circulating in his principality, for money is the instrument for effecting an equivalent exchange of natural riches . . . [and] is itself therefore the property of those to whom such riches belong. For if anyone gives his bread or the labour of his body for money, it is his when he receives it, even as were the bread and labour of his body." And if any were to object that the Saviour, on being shown a coin, asked, " Whose image and inscription is this ? " and when they said to him, " Cæsar's," He answered : " Render then to Cæsar the things that are Cæsar's," etc., it is plain from the context of the Gospel that " the penny is said to belong to Cæsar, not because it was inscribed with his image, but because it was tribute." . . .

As the money belongs to the community, " so it should be coined at the expense of the community . . . for example, if from a mark of silver 62 *solidi* [shillings] can be made, and two shillings are needed for the labour and expense of minting, then the uncoined mark of silver will be worth or valued at 60 shillings and the other two will go to the minting." . . .

As it is impossible, within the limits of this article to summarise the remaining nineteen chapters, which, as we have said, deal with the debasement of monies, we shall merely extract some of the economic truisms which occur in the course of the argument.

Coins are weights and measures just as much as are weights and measures of corn, wine, etc., which are not allowed to be tampered with (Chap. XII.), and thus money should never be altered except necessity or the evident utility of the whole people require it (Chap. VIII.). As the money belongs to the community it is for them and them alone to alter it in extreme cases, *e.g.*

in time of war, for the redemption of the prince, etc. (Chap. XXII.). In such cases they not only *may* but *ought* to debase money, such being the fairest, cheapest, and easiest way of raising a contribution for rich and poor alike; but it is for the community to decide as to the prince's necessity (Chap. XXIV.).

There are three ways of getting unnatural gain from money: (1) by exchange, which is vile; (2) by usury, which is evil; (3) by alteration, which is very evil. The profit gained by debasing money is worse than usury, as in usury the gain is a matter of contract and the loan benefits the borrower; while that from debasement is against the will of the people, of no profit to them and affects all, and so is "tyrannical and fraudulent" (Chap. XVII.).

Sometimes evil things are tolerated (*e.g.* disorderly houses) to avoid greater evils or scandals; also base occupations, *e.g.* exchange and usury; but debasement of the coin engenders, instead of preventing, scandals, etc., and it was one of the causes of the fall of the Roman Empire (Chap. XVIII.).

Debasement is injurious to the prince himself, because (1) he who punishes forgery becomes himself a forger; (2) his money ought always to be the same instead of varying in value from place to place, so much so that people cannot know its value and must bargain about it and sell it as if it were merchandise (Chap. XIX.). It is injurious to the people, because (1) the prince may thereby attract to himself all the money of the community; (2) the evil is all the more grave as not easily perceived; (3) gold and silver are carried out of the country; (4) bad counterfeit money is imported from abroad; (5) metal consumed by melting and re-melting; (6) foreign merchants afraid to bring goods into the country where coin is debased; (7) in the country itself trade is confounded, and it is impossible to fix prices, taxes, revenues, etc. (Chap. XX.). Honest professions gain nothing, while vile professions, money-changers, bullion merchants, etc., gain most by debasement, and, moreover, they can profit by previous warning of the prince's intention to debase (Chap. XXI.).

We see from this that Oresme clearly enunciates the principles of the law to which the name of Gresham was given centuries later, a law which, in fact, was understood and alluded to many centuries before by the Greek poet, Aristophanes.

To those who might hold that the Pope could give a prince the right to debase his money, our author, while declining to discuss the power of the Pope, maintains that he never has

granted such a licence and never would, for it would be tantamount to giving a licence to do evil, which the Pope himself has no right to do. The same is to be said of the Holy Roman Emperor (Chap. XXIV.).

We have now, we think, said enough to show the sterling worth of this mediæval treatise, and to induce our readers to study the original, in which they will find the fundamental, immutable principles underlying every healthy monetary system, principles which must be taken into account in seeking for and applying a remedy to the parlous financial situation of present-day Europe.

Dom Patrick Nolan, O.S.B.

THE IRISH STAPLE ORGANISATION IN THE REIGN OF JAMES I

During the period when the staple organisation flourished, that is to say, from the early part of the fourteenth to the later part of the sixteenth century, there was no distinction made between England and Ireland except in a few minor details necessary because of the natural differences between the two countries. The trade of England and of Ireland was at that time on a footing of perfect equality, and no premonition was apparent of the systematic discouragement of Irish industry which was destined later to become such an unfortunately prominent feature of English commercial policy. The Ordinance of the Staple of 1326 appointed Drogheda, Cork and Dublin the staple towns of Ireland, and the provisions laid down for their government were identical with those laid down for the English staple towns created at the same time (Gilbert, *Ancient Records of Dublin*, Vol. I. p. 135). The Ordinance of the Staple of 1353 added Waterford as a fourth staple town, and again made no discrimination between England and Ireland, with the exception that a special provision was inserted allowing Irish and Welsh merchants to transport their goods to the English staple towns, "because merchant strangers do not come so commonly into Ireland or into Wales for merchandise as they do into England" (*Statutes of the Realm*, 1810 Edition, Vol. I. p. 332). In 1358, owing to the dangerous condition of Dublin harbour, the benefits of the staple privileges were extended to ships anchored within the port, and later in the same year to ships anchoring in ports within six leagues of the city (Gilbert, *Ancient Records of Dublin*, Vol. I. pp. 19–20). In 1363 Calais was restored to its position as foreign staple (Duke, *Prolusiones Historicæ*, p. 65), a change which the Irish merchants seem to have felt as a hardship, for in that year petitions were presented from Dublin, Drogheda and Waterford in identical terms, complaining that "by pretext of a late ordinance for exporting all wool, hides and other merchandise from this kingdom to the town of Calais and not elsewhere, the burgesses were constrained to bring their merchandise, viz. old cloths, wool, hides,

and other small matters, much unlike the merchandise of other countries, to Calais, where they scarce sold for anything, and where wines, iron, salt and other goods useful for the land of Ireland were not to be found; and when the burgesses sold their merchandise at a low price in Calais, they were obliged to make a new freight to England, Gascony, or elsewhere to look for goods agreeable to their country, and so pay two freights for one to their great damage." In reply to these petitions the burgesses of Dublin, Drogheda, and Waterford were permitted to export direct to England (*Municipal Corporations Commission*, 1835, Appendix, pp. 581, 807; Gilbert, *Ancient Records of Dublin*, Vol. I. pp. 23–4). In 1375 Galway was considered to have attained a sufficient degree of commercial importance to deserve its own staple, and consequently this privilege was granted by a charter which professed to be "for the relief of the burgesses and merchants of the town, and that they and the other merchants of Connaught might no longer incur the dangers of shipwrecks . . . by going towards the city of Cork to pay their customs (Hardiman, *History of Galway*, p. 58). In the same year, a charter constituted a mayor and constables of the staple in Drogheda "as in four other towns of Ireland ordained for the purpose" (D'Alton, *History of Drogheda*, p. 165). The "four other towns" were Dublin, Waterford, Cork and Galway, and the number of Irish mediæval staple towns was then at its maximum, as the staple of Galway was abolished for some unexplained reason shortly afterwards (Hardiman, *History of Galway*, p. 59; *Chartæ etc.*, *Hiberniæ*, pp. 69–70).

The staples continued to occupy a prominent and active part in the municipal and commercial life of these cities in the fifteenth century. Some idea of the way in which they were regulated may be gathered from the archives of Waterford printed by the Historical Manuscripts Commission. It was decreed, for example, in 1470 that no man should be received into the freedom of the staple without the advice of the merchants of the staple who should be present at the council, and that no man should be admitted "unless of the said city of Waterford and of the English nation or else he have his liberty of the King." The mayor, sheriffs and gaoler of the city were mayor, constables and marshal of the staple respectively (*Historical MSS. Commission*, Tenth Report, App., Pt. V. pp. 282, 306).

We are not concerned with the general history of the staple system, and there is no necessity to discuss in detail how it gradually and imperceptibly became obsolete. Numerous highly

controversial matters have been discussed in connection with the system, but all its historians are in agreement on at least one point, namely, that it was virtually extinct before the end of the sixteenth century. The fall of Calais was doubtless " the lingering but fatal wound " from which the system never recovered (Duke, *Prolusiones Historicæ*, p. 79). It is true that the staple was transferred to Bruges, but it was only transferred to be forgotten (Fox Bourne, *The English Merchant*, p. 25). The charter alleged to have been granted in 1562 to the Mayor and Constables of England, assuming it to have been granted at all, which is extremely doubtful, certainly did nothing to revive the moribund institution, which lingered on only as a name (Anderson, *History of Commerce*, 1764, Vol. I. pp. 125, 400; Cunningham, *English Industry and Commerce*, Vol. I. p. 498). The rise of the Merchant Adventurers displaced the staplers from their position of commercial importance (*ibid.*, Vol. I. p. 497) and the *coup de grâce* was administered by the prohibition of the export of wool (*ibid.*, Vol. I. p. 125). The export of wool from Ireland was prohibited by two statutes of Henry VIII (13 Hen. VIII, c. 27; 28 Hen. VIII, c. 17) and restrained by severe customs duties by two statutes of Elizabeth (11 Eliz. c. 10; 13 Eliz. c. 1). The second of these two Elizabethan Acts provided that cloth should not be exported from Ireland except from the staple towns, so that the separate existence of the latter must have still been recognised; but it is fairly safe to say that the prohibition of the export of wool—which it must be remembered took place much earlier in Ireland than in England—sounded the death-knell of the old staples, which had by the end of the sixteenth century become a thing of the past.

The reign of James I witnessed a remarkable attempt to revive the staple system in Ireland, or rather to create a new system of staple towns. Something of the kind may be traced to the reign of Elizabeth, when, for example, in 1571 the corporation of Carlingford was granted the right to have a staple and free merchants thereof with privileges like those of Drogheda (*Commission on Municipal Corporations*, 1835, App., p. 738); but, generally speaking, the granting of staple rights did not assume any serious proportions until the following reign. The movement was divided into two phases; the first phase took place between 1605 and 1610, and the second phase between 1616 and 1619. In the years 1608–10 numerous towns were granted the right to hold staples; of many of these grants we have records, and it is probable that there were others of which the records are lost. In 1608 the corporation of Galway petitioned for the grant of various

privileges, amongst others, "that, in consideration of the great increase of mercantile transactions, a guild of merchants of the staple might be incorporated," and the petition was duly granted, Ulick Lynch being appointed the first mayor and Walter Martin and Peter Lynch the first constables of the staple (Hardiman, *History of Galway*, pp. 98–100). In 1609 the new charter of Drogheda granted to the corporation, provided that there should be a guild of merchants of the staple in the town and county, consisting of a mayor, two constables, and such a number of the merchants as to the mayor and two constables should seem expedient; that the mayor, sheriffs, burgesses and commons of the town might once a year choose the mayor and constables of the guild, who were empowered to take recognisances of the staple and exercise the office according to the statute; that the mayor, constables and merchants of the staple might make bye-laws; that no merchant but those of the staple should buy or sell any merchandise of the staple within the county on pain of forfeiting the goods, half to the King and half to the corporation, nor ship them unless purchased of a merchant of the staple of the town; and that none should buy or sell, by retail or private bargain, any merchandise within the franchise except merchants of the town and county (*Commission on Municipal Corporations*, App., p. 810). In the same year a charter granted a similar staple to Wexford, by which it was provided that the mayor of the borough should be mayor of the staple in the year after the termination of his office (*ibid.*, p. 622). The Cork charter created "a corporation of the staple with the same privileges as the corporation of the staple of London or Dublin" (*ibid.*, p. 28), and the Youghal charter granted a corporation of the staple "as fully as in Dublin," and provided that the mayor and bailiffs of the town in each year should be the mayor and constables of the staple in the following year (*ibid.*, p. 106). Similar charters were granted to Limerick (*ibid.*, p. 346), Dungarvan (*ibid.*, p. 64) and Kilkenny, the only inland town to which the privilege appears to have been extended (*ibid.*, p. 535). There is also evidence that Belfast possessed staple rights (*ibid.*, p. 698), and Carrickfergus was granted similar rights by a charter of 1612 (*ibid.*, p. 746).

It is apparent from these charters that the staples intended to be set up were modelled on the mediæval system, which, as we have seen, had practically been rendered obsolete by the loss of Calais. They possessed the same privileges with regard to the law merchant, were governed by the same organisation of a mayor and two constables, and, doubtless, were concerned with the

same commerce, namely, the export of wool. That export was prohibited by two statutes of Henry VIII, which had been repealed for all practical purposes by the later statutes of Elizabeth, but which were nevertheless still on the statute book and could be made the excuse for extorting fees for the grant of royal licences to export wool *non obstante* the statutes. In order that these grants of staple rights should possess any value, it was necessary that the towns enjoying them should also be granted *non obstante* licences. In fact, as will appear lower down, no practical result appears to have followed from these grants, and there is no evidence that the staples ever developed into active or even living organisations. In 1614 the export of wool was forbidden, not only to foreign parts, but even to England (*C.S.P.I.*, 1611–14, pp. 534–5); but it was explained by the Lords of the Council in London to Chichester in the following year, that " the prohibition was intended to apply to foreign parts, and not to England, whither it may be sent till the manufacture of cloth be better settled in Ireland " (*C.S.P.I.*, 1615–25, p. 84); and the King ordered the issuing of a proclamation to the effect that it should be lawful to export to England " such a quantity of wool as cannot well be draped in that kingdom " (*ibid.*, p. 94). Possibly the export which no doubt took place in pursuance of these directions was conducted through the newly erected staples, but of this there is no evidence. It must be remembered that it was at that time the policy of the Government to encourage the woollen manufacture in Ireland. It was at the same time sought to ensure that the surplus wool which could not be manufactured at home should provide raw material for the clothing trade of England rather than for that of her continental rivals. It therefore became important to provide that adequate machinery should exist to prevent Irish wool from being exported abroad and to collect the customs duties payable on its export to England. The provision of this machinery was the object of the new staple organisation of which we hear the first hint in 1616. The need for a new system of staples in that year is the best proof that the staples erected a few years earlier were ineffective, assuming them to have even come into existence.

The idea of the new organisation seems to have originated with Chichester and Grandison, and it was warmly taken up by the Privy Council, who appointed five commissioners to inquire into the project. The report of these commissioners makes it quite clear that the primary object aimed at by the scheme was the prevention of the export of Irish wool abroad, and, with this

object in view, they suggested the establishment of staple towns in England as well as in Ireland. They proposed that the Irish staples should be at Dublin, Drogheda, Waterford, Cork, Limerick, Galway, Londonderry and Carrickfergus, and the English at London, Bristol, Barnstaple, Workington and Chester or Liverpool. They further proposed that the staple towns should be governed alike in both countries; that there should be a general proportion of all the King's subjects in the societies of staples within the term of five years; that no person outside the staple should ship any wool; and that safeguards for the proper collection of the export duties should be set up. The report concluded by recommending that, if the ancient staple towns should refuse the reception of any of the King's subjects into their society, the Lord Deputy should transfer the staple to such other four towns as he should think fit. This recommendation is of interest, as it shows that the ancient staple towns, by which were clearly meant, not the towns granted staple rights by the patents of a few years before, but the four old mediæval staple towns, were still jealous of their privileges, and that they must therefore have continued to attach some value to their staple rights. The report is signed by Arthur Chichester, Oliver St. John, Lionel Cranfield, William Cockaigne and George Low (*C.S.P. Carew*, 1603–24, pp. 333–4).

This report was referred to Attorney-General Bacon, who agreed with it in the main, with certain reservations. He recommended in the first place that the English towns were to be granted no new staple rights, but were to be merely the receiving centres from the staple towns of Ireland, "without any other novelty." He then proceeded to point out that of the Irish towns mentioned, four, namely, Dublin, Waterford, Cork and Drogheda, were ancient staple towns, that Limerick had recently been made a staple town by a letter from the King, and that Galway, Carrickfergus and Londonderry were not yet erected staples, and suggested that new charters should be granted to all these towns restricting their staple rights to wool, woollen yarn and wool-fells, murkins, sherlings and lambskins. He recommended that the export of all these commodities should be prohibited by a fresh proclamation pending the erection of the staples. He suggested that, if the ancient staple towns refused to fall in with the new arrangements, they should be excluded from the benefit of any *non obstante* licences to export that had been granted to them, and pointed out that all the new charters must contain *non obstante* clauses, as the statutes prohibiting the exportation of wool were still in force. "There should be good care taken," he concludes,

" that the fine of the admittance into the staples company be not great, and that none come in but merchants " (*C.S.P. Carew*, 1603–24, pp. 329–30).

The matter was next referred to Sir James Ley and Richard Hadsor, who expressed the opinion that the staple privileges could be conferred by special letters patent with *non obstante* clauses. They suggested that the privileges granted to aliens and the restrictions imposed on the King's subjects by the old Ordinance of the Staple should not be put into execution, and that all the staple towns, ancient as well as new, should be made to relinquish all their rights to customs and forfeitures to which they were entitled by the statutes of Elizabeth dealing with the exportation of wool (*C.S.P. Carew*, 1603–24, pp. 320–1).

The project by this time seems to have assumed definite shape, and in March 1616–17 the Lords of the Council transmitted their instructions to the Lord Deputy Grandison. After reciting the aim of the scheme as being the prevention of the export of Irish wool to foreign parts, the dispatch states that " upon mature and grave deliberation the business has received a full approbation at this board and is ready for execution." The Lords proceed to refer to the difficulties connected with the ancient staple towns, " which, we hear, are not so conformable and willing to receive the conditions of this new staple as is fit they should be," and outline the method to be adopted to force them into compliance with the Government's requirements. " First cause a proclamation forthwith to be published for restraining generally the exportation of all sorts of wools, wool-fells, murkins, sherlings, lambskins, woollen yarn and flocks, the two first sorts being expressly forbidden by the statutes; and for the rest (the statutes not being so clear) the King's proclamation may supply them; so as all, being once equally prohibited, the King may release it again to the new staple towns by a *non obstante* in their charter, as also by altering the proclamation afterwards, with a saving and exception of the old staples, if their conformity hereafter do deserve it." The dispatch concludes by stating that the new charter will be drawn up with expedition (*C.S.P. Carew*, 1603–24, pp. 325–6). The Attorney-General was instructed to draw up bills for the King's signature " to enable the city of Londonderry and the towns of Drogheda, Carrickfergus and Youghal to be staple towns; and to give the markets of the said towns power to buy and transport all sorts of wool, etc., to the cities of London, Bristol and Chester, towns of Barnstaple, Liverpool and Milthrop (Milford), or some or one of them; and to endow the said city and

towns with the privileges as the merchants of the staple of England heretofore have had or now have" (*C.S.P. Carew*, 1603–24, pp. 327–8). Shortly afterwards the incorporation of Youghal was completed (*C.S.P.I.*, 1615–25, p. 164. The various documents referred to are not arranged in chronological order in the Calendars of State Papers; but, although some of them bear no date, the order in which they are here referred to is probably that in which they were written).

The staple system does not seem to have produced the benefits hoped for by its originators. The next thing we hear about it is a complaint from the Lord President and Council of Munster addressed to the government in Dublin in 1619, wherein it was represented that the restriction of the trade in wool caused by the new regulations was making it impossible for the tenantry to pay their rents. It is stated in this document for the first time that the object of the staple was to encourage the Irish woollen manufacture, but on this matter the Lord President and Council were under a misapprehension, because the development of the home industry was not one of the objects aimed at by the founders of the staple. They complain that one Walter Whyte, factor of the staples, engrossed the wool and transported it to England and to foreign parts for his own private gain, "and thereby overthrows a great number of painful English people and natives here, employed in making frieze mantles, caddowes and other woollen commodities, who are forced to give over that trade, as no wools are brought to their markets, and are so extremely dear in the staple town, and that town so remote as they are (not?) able to get a living out of them." The factor, it may be explained, was the official charged with the weighing of the wool (Cunningham, *English Industry and Commerce*, Vol. I, p. 313). They further complained that Whyte made use of the King's customs money to finance his dealings in wool. The market for wool, it was alleged, was not as free or as convenient for the vendors as before the staple was erected, and the purchase of wool had become virtually a monopoly. The land, moreover, was being once again diverted from sheep-raising because the English undertakers who went in for the rearing of English sheep were "so worn out and wearied" that they preferred to let the land to the Irish "to be tilled at the fourth sheaf" rather than to produce wool, which they themselves were forbidden to export for the benefit of the staples. The staple, moreover, was injurious to the King's customs, because the staplers did not export English goods to Ireland in exchange for the Irish wool, as had been the practice

of the old free merchants; and also because of the great increase of smuggling which had arisen (*C.S.P. Carew*, 1603–24, pp. 423–5). The Lord Deputy and Council forwarded this complaint to London with a covering letter wherein they expressed the opinion that "how fair this staple appeared at the first, the proceeding has discovered it to be full of fraud and inconvenience, producing no good, but working contrary to the discouragement of many that prospered in a fair and rich trade now in danger" (*C.S.P. Carew*, 1603–24, p. 425).

The Company of Staplers in Ireland furnished a detailed reply to these complaints. In the first place, they pointed out that a staple was not a new thing, and referred to the four mediæval staple towns. We learn from this document that the only town in which the staple had as yet been erected was Youghal, and the point was made that many of the injustices complained of by the petitioners would cease to exist if the other towns with equal privileges exercised them. They prayed for an inquiry into the allegations made against Whyte, which they said, if proved, amounted to a felony and would overthrow the whole Irish staple if suffered to go unpunished. With regard to the complaint that their operations had proved injurious to the woollen industry, they very properly pointed out that the encouragement of that manufacture was no part of their intended function, which was rather "to hinder the export of wool to foreign parts." They denied, moreover, that any such injurious effects had been produced, but alleged, on the contrary, that one result of the setting up of the staple was that the French and Dutch merchants had taken to exporting "coarse cloths and pieces" instead of the raw wool. To show the increase of the making of cloth, they appealed to the customers' books and asserted that some of them had embarked large capitals in the manufacture and had made some quantities of cloth, with which they had furnished the Lord Deputy himself and others, and, if the works had not been interrupted by complaints and opposition, the inhabitants of those parts might have had the benefit by it (*C.S.P.I.*, 1615–25, pp. 273–4).

Apparently this reply was not considered satisfactory, as a proclamation was issued on the 2nd of June, 1620, providing that every person might lawfully buy wool of the wool-grower to be manufactured in Ireland, though he or they were not of the staple; that every man might be admitted into the company of staplers without paying any fine; that the patent of the staplers should remain in full force; and that no wool or wool-fells should be

shipped either by licence bond or other authority into any other place except by the staple into the authorised ports of England (*Tudor and Stuart Proclamations*, Ireland, No. 231; Caulfield, *Council Book of Corporation of Youghal*, pp. 70–1). A month later, the King instructed St. John to make out patents to Dublin, Drogheda, Cork, Limerick, Galway, Carrickfergus and Londonderry "in the same form as the patent to Youghal," as these towns had hitherto neglected to take out their charters on the pretence that the expense of going to London was too great; "and," it was added, "if any of them be perverse to select others" (*C.S.P.I.*, 1615–25, pp. 291–2). Apparently some of these towns still proved recalcitrant, because we find that patents conferring staple privileges were granted to three other towns shortly afterwards, namely, New Ross, Kinsale and Clare (Ennis) (*Commission on Municipal Corporations*, 1835, App., pp. 72, 314, 559). Ultimately the charters were passed for the staples, but fresh difficulties arose. When the staplers sent their wool to Chester, having duly performed all the legal formalities required, they found that its sale there was prohibited by proclamation (*C.S.P.I.*, 1615–25, p. 336). The Carrickfergus charter was not completed before 1623 (*Commission on Municipal Corporations*, App., p. 746).

It is not to be wondered at that disappointments of this kind should have tempted the exporters of wool to trade in foreign markets, and it would appear that the illegal transportation of wool abroad continued in spite of the steps that had been taken to prevent it. In 1623 the Lord Deputy reported to London that he had instructed the officers of the customs "to suffer no more wool to be exported except to England and Wales and to such ports there as were allowed by former proclamations and directions" (*C.S.P.I.*, 1615–25, p. 402). The Government, however, had only itself to blame for the continued exportation to foreign parts, as it is apparent that the admission of Irish wool into England was impeded in spite of the rights of the staplers to transport it freely implied in their charters. Among the "matters of grace and bounty to be rendered to Ireland" in 1626 was the right "to import wool from the Irish to the English staple towns according to the staplers' charter, paying only the existing impositions" (*C.S.P.I.*, 1625–32, p. 157), and two years later the right was again admitted in reply to a remonstrance from Ireland which shows that it must have been denied in practice (*C.S.P.I.*, 1625–32, p. 331). In 1631 Lord Esmonde wrote to Lord Dorchester to the effect that the people of Ireland were full of complaints of

the impost laid on wool, under which nobody might transport it to England without special warrant from the Lords Justices. "Even the staple towns," he adds, "are now forbidden to sell wool to England" (*C.S.P.I.*, 1625–32, p. 616).

It would appear from these complaints that the staple system was never given a fair trial in spite of the expense which the staple towns had incurred to obtain their privileges. It is quite clear from Strafford's Correspondence that the system, even assuming that it had ever had any active existence, was obsolete in 1633. In that year Strafford wrote to the King seeking permission to give licences for the transport of wool. He gave three reasons in support of his request: first, that it would benefit the customs, as the wool would pay duty four times if transported raw to England and brought back in the form of cloth; second, that there was no means of working it up in Ireland; and third, that it would assist the English clothing manufacture. He then proceeded to state that "to entrust the exportation in the hands of the merchant staplers is a remedy worse than the disease," and added, that "their charter is forfeited by non-usance, and shall never be renewed unto them again by my advice, it being a corporation newly set up by the device of my Lord Grandison, only, as they say here, to put some crowns in his purse." He thought that the licences would bring in some three or four hundred pounds a year—which he was not averse to putting in his own purse—and concluded by seeking an early reply, as he was besieged by the clamour for licences. King Charles's answer was a grant of the right "to give licences for transportation of wools out of Ireland into England only, with restraint of the staplers" (*Strafford's Letters*, Vol. I. p. 202).

After Strafford's time we find no further reference to the Irish merchant staplers. The licence system definitely took the place of the staple system in regulating the export of wool, which was exported after 1633 from a number of ports to which no staple privileges had been granted, such, for example, as Baltimore, Donaghadee, Strangford and Dundalk (*C.S.P.I.*, 1633–47, p. 311). In 1641 a proclamation was issued authorising the transport of wool from several Irish to several English ports, including many ports on both sides of the channel which had never possessed staple privileges (*Tudor and Stuart Proclamations*, Ireland, No. 338), and in the various communications which passed between the King and his Irish subjects in that year respecting grievances, although the export of wool is frequently mentioned, there is no reference made on either side to the staples set up in the previous

reign (*C.S.P.I.*, 1633–47, pp. 317, 318). Shortly after the Restoration, two Cork gentlemen offered to subscribe a large sum of money in return for the exclusive privilege of exporting all Irish wool to England, a privilege which they call a wool-staple, but which was nothing of the kind, being rather a monopoly. The only importance of this proposal for our purpose is that it contains no reference to the Jacobean staples, which must by that time have become forgotten as well as obsolete (*C.S.P.I.*, 1660–2, p. 151). Throughout the reign of Charles II licences were granted for the export of wool without any restriction as to the port of departure (*C.S.P.I.*, 1660–2, pp. 590, 691; 1663–6, pp. 230, 714). In 1675 a proclamation was issued providing that wool should be shipped only from certain ports which, curiously enough, happened to be the ports which possessed staples in the earlier part of the century (*Tudor and Stuart Proclamations*, Ireland, No. 882). It is not, however, legitimate to infer from this coincidence that the staples were still in being; the same ports were probably selected on this occasion for the same reasons which caused them to be selected as suitable points from which to supervise and check the smuggling of wool abroad. In the first year of the eighteenth century, the grand jury of Wexford presented a petition praying that the export of wool should be again permitted from New Ross, and no reference was made to the town's former staple privileges, which would certainly have been mentioned if they were considered to have the slightest bearing on the matter (*Journal of Royal Society of Antiquaries of Ireland*, Vol. XXXI. p. 55). In 1731 the Irish House of Commons appointed a committee to consider the most effectual means of preventing the export of wool, and the report of this body contains not the slightest reference to the staple towns (*Irish Commons Journal*, Vol. IV. p. 46). All the evidence which we can collect seems to point to the same conclusion, namely, that the staple towns had no special privileges or recognition after the vice-royalty of Strafford.

Certain traces of the staples nevertheless lingered on in the municipal as distinguished from the commercial life of Ireland. In 1633 all the rights and revenue of the staplers in Cork were declared to be held in trust for the corporation of the city (Caulfield *Council Book of Cork Corporation*, p. 167). A table of precedence of the corporation of Galway composed in 1643 places the mayor of the staple immediately after the mayor and recorder of the city, and the constables of the staple in front of all the other ex-sheriffs (*Historical MSS. Commission*, Tenth Report, App., Pt. V. p. 493), and King James II's charter to Dublin appoints by

name a mayor and two constables of the staple (Gilbert, *Ancient Records of Dublin*, Vol. I. p. 75). A remarkable revival of the staple took place in Limerick in 1824, when, by an order of the Privy Council, thirty-two members of the guild of the staple were named, of whom several were freemen of the city. The sole object of thus reviving the staplers was to enable them to send representatives to the common council of the city, but the staplers were confronted by certain legal difficulties in enforcing this claim to representation, and they lapsed into further obsolescence without holding a single meeting of their number (*Commission on Municipal Corporations*, 1835, App., pp. 348–9).

In Dublin the guild of merchants, which was the leading guild of the city, continued till last century to elect a mayor and constables of the staple every year. These officers had no duties to perform. There used to exist in the town clerk's office books of the staple in which statutes staple were entered, and in the eighteenth century searches used to be made in these books for judgments affecting property in the city (*Commission on Municipal Corporations*, 1835, Report on Dublin, p. 273). In Drogheda the mayor of the staple was created a justice of the peace *ex officio* in 1697, and in 1835 there still remained in existence a mayor and two constables of the staple. The mayor of the city of one year was nominated mayor of the staple in the next, and the sheriffs of one year became constables of the staple in the next. The mayor of the staple of one year was appointed master of the guild of merchants in the year following, and the constables of the staple wardens of the guild of merchants in the same manner. These offices had become merely nominal, no duties being performed, although the mayor of the staple continued to be a justice of the peace under the charter of William III (*Commission on Municipal Corporations*, App., p. 818). The procedure in Drogheda is interesting as showing that the staplers and the guild of merchants were not identical, as might have been inferred from the practice in Dublin, however close the connection between the two bodies may have been (Gross, *The Gild Merchants*, Vol. I. p. 147). In Dublin the relation between the two bodies seems to have been that the staplers constituted a sort of senior branch or inner ring of the guild of merchants. Dr. Gross, who studied the matter carefully, arrived at the conclusion that "the staple was evidently regulated by the guild though distinct from the latter. The staple may be regarded as a section of the guild merchant consisting of the wealthier members" (*The Gild Merchant*, Vol. II. p. 85). As late as 1844 the staplers of Drogheda

maintained the form of a separate corporation, and continued to elect their annual officers (D'Alton, *History of Drogheda*, p. 167). In Youghal in 1835 the ex-mayor was called the mayor of the staple and the ex-bailiffs constables of the staple, but these officers had no duties to perform, and there was a class of freemen who were not members of the corporation, and were called "freemen of trade" (*Commission on Municipal Corporations*, 1835, App., p. 107).

These surviving traces of the staple organisation do not disprove our assertion that the merchant staplers were a thing of the past before the middle of the seventeenth century. Municipal conservatism frequently preserves the forms of things of which the reality has long since vanished. Thus, the guilds continued to exist for the purposes of municipal representation long after they had ceased to perform their original economic function. All the evidence seems to show that the Irish staple organisation lasted but a very few years, if, indeed, it was ever given a chance of existing at all. The probability is that, like so many other experiments that have been tried in Ireland, it was never allowed to operate, but was replaced by something else before it had time either to be a failure or a success. The staples aimed at no object which could not be attained equally well, if not better, by other means. The prevention of the export of wool abroad was a matter for the general machinery employed to deal with smuggling, and the collection of the customs duties on the legitimate export could be ensured by the licence system as well as by the staples. The development of the woollen manufacture was no part of the objects aimed at by the founders of the staple, and the staple must not, therefore, be blamed for the failure of that industry to develop. (Dr. Hugh O'Grady seems to labour under the mistaken impression that the staples were designed to foster the woollen manufacture: *Strafford and Ireland*, pp. 319–21.) One cannot help wondering if the most potent motive influencing those who founded the staple was not that referred to by Lord Strafford, namely, the desire to put something in their own pockets. The fact certainly remains that the enthusiasm of the Government in the matter seems to have waned as soon as the patents appointing the staple towns were taken out, and, presumably, the appropriate fees paid. The staples were at all events designed in the first place with a view to the collection of the revenue rather than to the encouragement of any particular commercial policy for the benefit of the community at large; they were, as Dr. Cunningham has said of their mediæval prototype, "primarily a fiscal organ

though also subserving trading purposes" (*English Industry and Commerce*, Vol. I. p. 416).

It was not only in the objects which they aimed at attaining that the new Irish staples remained true to their mediæval models. The old system of government by a mayor and constables and the method of weighing the wool and collecting the custom were all reproduced. The Irish staplers of the seventeenth century, moreover, possessed a feature in which, according to Dr. Gross (*The Gild Merchant*, p. 146), they had differed from the English even in the Middle Ages, namely, that the organisation in each town was a distinct corporation with an individuality and a life of its own, whereas in England there was but the one corporation for the whole country. The Jacobean revival was, moreover, confined to Ireland; nothing corresponding took place in England. The question of the staplers' privileges came before Parliament a couple of times in the reign of James I, but no action was taken with regard to them (*Historical MSS. Commission*, Third Report, App., pp. 15–25; *Commons Journal*, Vol. I. p. 505; *Lords Journal*, Vol. III. p. 174). In 1616 a proclamation was issued removing the staples from Middleburg, Bruges and Bergen-op-Zoom, where it had been placed by Queen Elizabeth, and appointing a number of English towns, both seaport and inland, as staple towns (*Tudor and Stuart Proclamations*, No. 1197). But this measure, as appears from the recital, was directed in the interests of the clothing industry, and aimed at preventing the export of English wool abroad, and was in no sense a revival of the old staple system, which dealt primarily with the export trade. The Irish revival which we have described in this paper was in direct line with the old mediæval staple system, the principal innovation being that the ports abroad to which the wool was to be transhipped from the staple towns were situated not on the Continent but in England.

GEORGE O'BRIEN

THE CONSUMPTION OF TOBACCO SINCE 1600

Before the beginning of the eighteenth century there does not seem to have been any thought of collecting the statistics of tobacco imports and consumption either for publication or reference. They were sometimes given in answer to a question in the House of Commons, but were not printed, being bound up with the miscellaneous papers of the session in the Commons' library, and were destroyed in the fire of 1834.[1]

Sometimes, when the answer has been preserved in the Journal or some contemporary account, it is not of very great use, as only the money value of the import is given. Moreover, not only were the accounts not well kept, but the assessment of money value was quite arbitrary. In practice it seems to have been adjusted to bring in the income desired from the tax. In the Book of Rates two different values for tobacco are given, 20*s.* a pound and 6*s.* 8*d.*, according as the rate is for impost or subsidy. Spanish and Virginian tobacco, the first five times the value of the second, were given the same rate.[2]

Spain and France may have been the first European countries to use tobacco, but England was the first to smoke. The habit was introduced by sailors and travellers returning from Virginia, and spread rapidly. By 1625 tobacco seems to have been universally used in England, irrespective of class, age or sex.

The first official figures of importation are for the year 1602, in which year 16,128 pounds of tobacco entered the port of London.[3] From one-half to two-thirds of the imports entered through the port of London, so we may assume that the annual consumption of tobacco in England at the beginning of the century was not more than 25,000 pounds. In 1610, Spanish tobacco to the value of £60,000 is said to have been imported. At prevailing prices this probably represented from 50,000 to 75,000 pounds weight, according as to whether it did or did not include the duty. Tobacco was not cheap. In 1615 "the greatest part" was sold "for ten times the value of pepper, and the best

[1] Select Committee on Library, etc., 1834. [2] *Rates of Marchandizes.*
[3] *State Papers, Domestic,* James I, Vol. IX, No. 1.

of it weight for weight with silver." [1] In a debate in the House of Commons in 1614 a member complains that goods are sent out of England to be exchanged for tobacco ". . . infinitely to the prejudice of the whole commonwealth. . . . Many Divines smell of Tobacco. . . . Poore men spend four pence of their days wages at night in smoke."

For the next seven years our figures are official. In 1621 the Lord Treasurer informed the Virginia Company that the " medium of the quantity of tobacco brought in these last seven years ending in Michaelmas 1621 " amounted to " 142,085½ " pounds.[2] In addition to this official figure, we have also the statement that England spends £60,000 a year on Spanish tobacco.[3] The price at this time being from 8*s.* to 10*s.* a pound, exclusive of the duty,[4] this would indicate an importation of 120,000 to 150,000 pounds, a quantity not inconsistent with the figure given by the Lord Treasurer and the statistics available of exports from Virginia.

The demand for tobacco grew rapidly. Statistics of exports of tobacco from Virginia for the early years of the seventeenth century have been collected in America, and show a rapid increase of supply [5]:—

1619	20,000	pounds
1620	40,000	,,
1621	55,000	,,
1622	60,000	,,
1626	500,000	,,
1629	1,500,000	,,
1630	1,500,000	,,
1631	1,300,000	,,

These figures exaggerate the rapidity of the increase of demand after 1620, as to a great extent they indicate the displacement of the expensive Spanish tobacco by the cheaper Virginian. The cultivation of tobacco even in small patches did

[1] According to Rogers, *History of Agriculture and Prices*, the price of pepper ran from 2*s.* to 2*s.* 6*d.* the pound at this time, so that at ten times that value tobacco would sell for 20*s.* to 25*s.* the pound. That tobacco was sold for its weight in silver is verified by Aubrey, who says: " I have heard some of my old yoeman neighbors say . . . they culled out their biggest shillings to lay in the scales against tobacco," Aubrey, *Lives*, II, 181, writing in 1682. The shillings of the time varied from fifty-six to seventy to the pound avoirdupois. See also " C.T.," p. 3.

[2] *Virginia Company Proceedings*, II, 199.

[3] *Commons Journals*, 17th April, 1621.

[4] *Virginia Company Proceedings*, I, 34.

[5] Arnold, p. 11.

not begin among the English settlers in Virginia before 1612. In that year John Rolfe first attempted its cultivation. His experiment was so successful, and the demand for his product so great, that by 1616 tobacco had become one of the staple crops of the colony. In 1617 the plant was being cultivated in the streets and market-place of Jamestown, such was the demand for ground for growing it.[1]

In 1624 James agreed, at the instance of the London Company of Virginia,[2] to limit the importation of Spanish tobacco to 60,000 pounds per annum, and in the following year issued a proclamation prohibiting the importation of any tobacco but that grown in Virginia and the Somers Islands.[3] This was renewed a year later by Charles,[4] and as at this time Spain and England were once more on bad terms, it is likely that the prohibition was at least partially enforced. Later, in 1626, all commerce with Spain was forbidden. In 1627 Charles issued another proclamation; ". . . Spanish tobacco is so much appreciated that it is smuggled and the Revenue from it lost. . . . In future fifty thousand weight of Spanish Tobacco may be imported by the Commissioner as Royal Merchandise." [5]

Simultaneously with the increased importations of plantation tobacco came the re-exportation of tobacco to Europe, and after 1625 allowance has to be made for tobacco re-shipped from London. Indeed some exportation must have taken place even earlier, though probably in very small quantities. In 1610 the Venetian ambassador at Constantinople wrote to his home government: " The Pasha caused to be burned before his tent a keg of tobacco, a certain herb which comes as a medicine from England, and which has formerly been used here but is now prohibited. . . ." [6]

For the year 1628 someone has left us an estimate of the revenue obtainable from tobacco, which gives round figures for the annual importation at the time: 50,000 pounds of Spanish tobacco and 350,000 of Virginian.[7] For 1632 and 1633 we have a record of the amount the people of Virginia thought England ought to consume. Charles had dallied with the idea of a tobacco purchase monopoly, and the Governor of Virginia suggested that the privilege should be vested in Royal Commissioners, who should be authorised to purchase 600,000 pounds annually, but

[1] Smith, *Captain John*, p. 535. [2] *Bruce*, I, 216–18, 270.
[3] The Bermudas. [4] 1624–25, 2nd March, and 1625, 9th April.
[5] 1626–27, 17th Feb., *B.L.*, 1505. [6] *C.S.P.* (*Venetian*), 1607–10, p. 505.
[7] *C.S.P.* (*Domestic*), Addenda, 1625–49, p. 315.

nothing further was done about it. In 1634 Lord Goring and associates offered to purchase 600,000 pounds annually, but the price offered, sixpence the pound, was unsatisfactory to the colonial planters, and no agreement was reached.

In addition to the tobacco imported from Virginia, other English colonies and the Spanish dominions, a certain amount was grown in England. In 1619 the English production is said to have been sufficient to depress considerably the price of imported Virginia leaf, and James was prevailed upon by the London Company of Virginia to prohibit by proclamation its cultivation at home. In order that this proclamation should be enforced, the company employed an informer to assist the authorities in the search for and destruction of English-grown tobacco.[1]

In the next few years almost a series of proclamations was made by James I and Charles I, but seemingly with little effect. In 1652 the Commonwealth passed a law against the cultivation in England, but found it impossible of enforcement, although they tried for three successive years. In Gloucestershire the attempt aroused armed resistance, and in 1654 the commissioners reported to London that they "durst not destroy any [home-grown tobacco] about Winchcomb, as the people raised 300 armed horse and foot to fight the troops . . . saying they were bred to the trade and if they lose it they will lose their lives."[2] This was followed by a petition to the Protector from the growers begging "toleration for the year's crop" and promising not to plant in future, "though that has been our trade for forty years." Their petition was granted for the year, the growers to pay excise duty to the Commonwealth.[3] Finally, in 1661 an Act was passed prohibiting cultivation. Gloucester County continued to grow some tobacco, but not with impunity.[4]

For four years, 1637 to 1640, the imports of tobacco to the port of London were [5]:—

1637.	Total	1,500,000	pounds,	including	60,000	pounds	Spanish.
1638.	,,	3,100,000	,,	,,	93,000	,,	,,
1639.	,,	1,400,000	,,	,,	110,000	,,	,,
1640.	,,	1,300,000	,,	,,	6,000	,,	,,

These are the official figures for total importation, as all ships with tobacco had to come to London. The higher figures for

[1] Treasury Committee, 1923 and *Virginia Company, Proceedings.*
[2] *C.S.P.* (*Domestic*), 1654, pp. 229–30.
[3] *C.S.P.* (*Domestic*), 1654, pp. 229 *et seq.*
[4] Treasury Committee, 1923. [5] Hardwicke MSS., 35865 ff., 248.

1638 may be partially due to the presence of Sir John Pennington with a man-of-war in the Channel, with instructions to take bond of masters to take their ships to London.

Here we have a gap of nearly fifty years. In the interval tobacco importations to London had increased tenfold, tobacco brought into that port for five years amounting to [1] :—

1689	14,392,635 pounds
1690	12,638,027 ,,
1691	14,830,503 ,,
1692	13,425,464 ,,
1693	19,866,048 ,,

Writing about the same time (1688–90), Aubrey says : " Mr. Michael Weekes of the Royall Society assures me, out of the custom house books that the customs of tobacco over all England is £400,000 per annum." [2] This would indicate a net importation of some 16,000,000 pounds, Probably about half this would be nearer the truth.

For the period from 1689 to 1709, our figures are again official. From statistics collected by the customs, Davenant places the average annual consumption of tobacco in England at 11,300,000 pounds, out of a total average yearly importation of some 28,000,000 pounds—or two-fifths of the total.[3]

There is a decided slump in the twenty years from 1709 to 1731, in which latter year 15,787,153 pounds of tobacco entered the port of London, but for the same year the total importation is set roundly at " 60,000 hogsheads, one with another 600 pounds weight," making a total of 36,000,000 pounds.[4] This is more in keeping with Davenant's estimate, but as the writer was employing it to demonstrate the value of the plantation trade to England, it probably errs on the side of over-statement.

For 1732 we have the net revenue of the customs given in round numbers, £160,000; the gross revenue was £740,000.[5] With duty at 6½*d.* this represents an importation of about 5,200,000 pounds, or about one-fifth of the total importation of nearly 30,000,000 pounds. This low figure for home consumption is explained by the prevalence of fraud and smuggling.

Our next lot of figures are " From the English plantations

[1] *A Calculate of the Tobacco Imported.*
[2] Aubrey, II, 181.
[3] Davenant, *Works*, V, 428.
[4] Macpherson, III, 163.
[5] Dowell, IV, 253.

in American into England, Christmas 1736 to Christmas 1743 [1] :—

To Christmas	1737	50,196,181 pounds
,,	1738	40,103,449 ,,
,,	1739	46,654,453 ,,
,,	1740	36,108,471 ,,
,,	1741	59,080,618 ,,
,,	1742	43,459,350 ,,
,,	1743	56,765,966 ,,
		332,378,488 ,,
Medium		47,482,641 ,,

From the same source we have, for the five years 1738 to 1743, the total average yearly importation from all countries—48,500,000 pounds, of which amount approximately one-sixth, or 6,300,000 pounds, was retained for consumption in England. For the same period, as seen from the table just given, the amount from the English plantations in America averaged 48,400,000 pounds, leaving about 100,000 pounds a year to be accounted for by imports from all other countries.[2]

For the three years 1744 to 1746 inclusive, our figures are "from the custom house books" [3] :—

Total import	120,000,000 pounds
Re-exported	99,000,000 ,,
Retained for home consumption	21,000,000 ,,

or 7,000,000 pounds per year. About this time many pamphlets were published giving figures for total imports as high as 50,000,000 pounds, but these were published by people with theses to prove (it was the period of the much-hated Excise Bill of Walpole), and, as Macpherson wisely remarks, "are to be read with caution, like all others published for such particular ends." [4]

Here we have another gap of fifteen years. In the eight years 1763 to 1770 inclusive, an average of 66,780 hogsheads was exported from the colonies to England. In the last of these years the importation was 96,000 hogsheads, of which 14,000 were retained for home consumption, which at 750 pounds the hogshead would amount to some 10,000,000 pounds, but this year was above the average.[5]

The period from 1775 to 1786 includes the War of Inde-

[1] Liverpool MSS., B.M. 38330, ff. 278.
[2] *Ibid.*
[3] Macpherson, III, 254.
[4] *Ibid.*, 164–5.
[5] *Southern Fertiliser Co. Position*, etc., p. 18.

pendence. The official Custom House figures, together with the differences between them, are [1]:—

	Imports (pounds).	Exports (pounds).	Differences (pounds).
1775	101,800,000	74,200,000	27,600,000
1776	14,700,000	40,000,000	−25,500,000
1777	2,400,000	8,400,000	− 6,000,000
1778	12,000,000	4,400,000	7,600,000
1779	17,200,000	6,200,000	11,000,000
1780	17,400,000	6,000,000	11,400,000
1781	13,300,000	5,700,000	7,600,000
1782	9,800,000	3,500,000	6,300,000
			40,000,000

The minus quantities, in the last column of the table, are explained by the lag, between importation and consumption, of three to four years; the average quantity in the warehouses at any one time amounts to approximately three years' supply.

From 1786 to the present time the official Custom House figures of home consumption have been preserved. These are given up to 1825 for Great Britain alone in Table A, and after 1815 for the United Kingdom in Table B. The figures for Ireland for the first twenty-five years are available in two sets, which do not agree, and which exhibit such divergences and fluctuations that it has been considered best to omit them altogether. On the other hand, the most complete tables for home consumption after 1815 are for the United Kingdom, and, as the imports and exports between the three countries are not known, they are the more reliable.

Smoking, as a social habit, has had its ups and downs. Assuming a population of 5,800,000 in 1700, the *per capita* [2] consumption works out at just under two pounds a year. In 1786 the *per capita* consumption was less than half this amount (Table A). In the course of the eighteenth century smoking went out of favour, and snuff took its place to a very great extent, with a resulting diminution in the consumption of tobacco, for the snuffer uses much smaller quantities of the weed than the smoker; the stalk is used in the manufacture of snuff and many foreign substances are introduced in quantities. By 1700 smoking was falling into disfavour in the upper circles of society, and in 1773 Johnson declared that it had completely gone out. But among the working class and a few other groups the habit persisted, and in 1732, when Walpole proposed, in his

[1] Macpherson, IV, 37. [2] Gonner, *Jour. R. Stat. Soc.*, LXXVI, 261.

Excise Bill, the extension of the Excise to tobacco, it aroused such extensive opposition that he was forced to abandon it.

Smoking came in again from the army and the universities, where it had never completely died out. The cigar first broke through the defences of the enemies of smoking, and its introduction into England may be charged to the Peninsular War. Wellington made a last stand against the spreading habit in 1845, and issued an order against smoking,[1] but for once met with defeat.

But the smokers' victory was not overwhelming, and some strongholds never gave in. Victoria detested smoking, and never permitted it about the Court. Even where the cigar was accepted, the pipe remained under the ban. Under no conditions was smoking permitted in the presence of ladies. Only in 1868 was smoking permitted on the railways, when special compartments were provided for smokers by the Railway Bill of that year.[2]

The Peninsular War brought in the cigar, the Crimean War introduced the cigarette. Of convenient size for a brief smoke, not requiring the paraphernalia necessary to the pipe, nor leaving behind the strong odour of the pipe or cigar, it insidiously made its way everywhere, upstairs and downstairs, and sometimes even in my lady's chamber.

There are no official figures for the consumption of cigarettes in England, but if we assume that the increasing popularity of the cigarette here has paralleled that in the United States, the quantity is enormous. In the nineties the factories of the United States used some 15,000,000 pounds of tobacco annually in the manufacture of cigarettes. In 1900 it had reached 20,000,000; in 1912, 50,000,000; in 1916, 100,000,000; and in 1923, 202,000,000 pounds.[3] A writer in the Tobacco Number of *The Times*, 20th Oct., 1925, estimates that 70 per cent. of the tobacco imported is manufactured into cigarettes. This would make the consumption of cigarettes quite as great proportionately in England as in America.[4]

[1] "The Commander in Chief has been informed that the practice of smoking by the use of pipes, cigars or cheroots has become prevalent among the officers of the army, which is not only in itself a species of intoxication occasioned by the fumes of tobacco, but undoubtedly occasions drinking and tippling . . . and he entreats officers commanding regiments to prevent smoking in the messrooms . . . and to discourage the practice among officers of junior rank," Penn, p. 89.

[2] 31 & 32 Vict., c. 119, s. 20. [3] *U.S. Stat. Abstract*, 1924, p. 351.

[4] An inquiry was made of the Imperial Tobacco Company, but they found themselves unable to give the information, and expressed the opinion that it was not information that one might reasonably expect a manufacturer to give.

Throughout the first half of the nineteenth century the *per capita* consumption of tobacco remained fairly constant, fluctuating about one pound per annum. In 1885 it reached 1·3 pounds, and then began to rise slowly. By 1900 it had reached two pounds, and increased but slightly to 1914. The jump to three pounds *per capita* occurred in 1919. It may seem strange that this sudden increase is a post-war rather than a war-time occurrence, but it must be remembered that these figures are only for tobacco on which duty has been paid. Tobacco is shipped free of duty to ships stores, the navy and expeditionary forces. The excess of the amount of tobacco released for the fighting forces over the normal peace-time amount was 37,000,000 pounds in 1917 and 43,000,000 pounds in 1918. At this estimate the peak of consumption was reached in 1917–18, at somewhere about 3·4 pounds *per capita*. It is evident that there must have been a great increase in consumption at home, as well as among the expeditionary forces, as otherwise the figure for home consumption must have dropped considerably on the withdrawal of so many men for service abroad.

An attempt was made to work out the correlation, if any, between the consumption of tobacco and the trade cycle. For this purpose Beveridge's figures for unemployment [1] 1860 to 1900 were taken and compared with figures showing the deviation of tobacco consumption each year from a nine-year mean. The period chosen was a good one for this purpose, as the rates of duty remained fairly constant throughout. (See Table B.)

For the forty-year period the correlation works out at $r = -\cdot 31$, but it is evident on inspection that there is a slight lag in the figures for tobacco. Moving this whole set of figures up a year and extracting r gives us $r = -\cdot 48$, a somewhat higher correlation than inspection of the figures had led us to expect. The quantitative fluctuation is not great; an increase in unemployment from 2 to 10 per cent. only decreases the consumption of tobacco by two million pounds, or something over 1 per cent., and it must be remembered that we know nothing of the fluctuations in dealers' stocks. On the whole the demand for tobacco would not seem to be very elastic.

These statistics seem to be as complete as possible for the present. Some of the figures are official, some merely estimates. The guesses of contemporary writers with a thesis to prove have been neglected; generally they are absurd. The question

[1] Beveridge, percentage unemployed: selected trades.

now arises, To what extent do these statistics represent the amount of tobacco actually consumed?

Three things have to be considered: errors in accounting, changes of weight in manufacture, and frauds, including smuggling, underweighing, adulteration and so on. Errors in accounting will be dealt with under the head of fraud, except for the mention of them already made in reference to the earliest period.

The allowance made for change of weight in the process of manufacture varies with different authorities. An average estimate, which is borne out by evidence given before various committees, is that of Axon, who puts it at 30 per cent. increase due to the absorption of moisture after importation.[1] Some tobaccos contain a large percentage of flavouring or sweetening material, and as the law since 1863 requires that such tobaccos be manufactured in bond and the duty paid on the finished product, their weight is included in statistics given.[2] We shall probably be safe in assuming that the statistics given come within 25 per cent. of the weight of the finished product that reaches the consumer. The increase of weight is not greatly set off by the waste of unused parts of the tobacco in manufacture.

With these allowances we can assume that our figures for the last seventy-five years or so are reasonably accurate, but before this a variety of factors, such as adulteration, smuggling and various forms of fraud, render the degree of accuracy a matter for doubt.

Throughout the whole history of the tobacco trade smuggling plays a prominent part. Charles' proclamation of 1627 dealing with the smuggling of Spanish tobacco has already been mentioned. In 1660 the first reference occurs in the Commons Journals: "The House being informed that great quantities of Spanish tobacco lately imported have been landed and secretly conveyed away by several persons without due entry or payment of customs or excise. . . . That the Sergeant-at-Arms, himself or his deputy, do forthwith seize, inventory and secure the said tobaccos wherever they shall be found. . . ."[3]

Throughout the seventeenth century smuggling was a modest and unadvertised profession. The smuggler went his quiet way undisturbed by troublesome Government officials. Only in 1698 was the first force of customs men organised. These were

[1] Axon, *Jour. R. Stat. Soc.*, XXXV, 339.

[2] The figures given in the tables include manufactured tobacco, but as the quantity averages something under 2 per cent. of the total quantity of tobacco imported, it is quite negligible, under 0·03 pound *per capita* per annum.

[3] *Commons Journals*, 1660, 6th Sept., VIII, 154.

the "riding officers" of the south coast. Three hundred of them were installed to check the export of wool and incidentally to repress all smuggling.[1]

Large quantities of tobacco were at this time brought from the colonies in bulk and smuggled into England, so that, although there was considerable waste in this method of shipping, it depressed the price of tobacco, sometimes to little over the amount of the duty. It was brought in small ships into the out-ports, creeks and estuaries along the coast and peddled from town to town on packhorses. The practice prevailed throughout the latter half of the seventeenth century, and the demand of whole districts is said to have been supplied by it.[2]

Throughout the first half of the next century smuggling was particularly rife. The smugglers had the sympathy of the local populations, indeed were of it. The King's men gave very little trouble, and the duty was simply ignored. When smuggling did begin to meet with opposition, many of the smugglers took to the use of force, and in some cases gangs of ruffians successfully resisted all efforts of the officers and even terrorised the countryside. In Sussex and Kent the smugglers were so powerful that magistrates feared to convict offenders brought before them.[3]

At sea, especially in the latter half of the century, smugglers resorted to larger ships, heavily manned and armed, and faster and more powerful than the revenue's. Smuggling continued on a grand scale, and sufficient quantities of tobacco were brought into the country duty free to depress the price below the amount of the duty. Smuggled tobacco was openly on sale in London for two-thirds, and in the country for one-half the price at which legally imported tobacco could be sold. Before a Royal Commission the amount smuggled was variously estimated at one-half, twice, and six times the amount legally imported. This Commission reported: "It is the opinion of the Commissioners of the Excise, from which we cannot dissent, that the Excise duties alone would, if smuggling could be prevented, increase the revenue three times." [4]

In addition to smuggling a method existed for bringing in tobacco without paying duty. This was first brought to the attention of the House of Commons in 1721,[5] and there is no doubt that it had been quite extensively employed in all parts

[1] Shore, p. 142.
[2] *Essay on Bulk Tobacco.*
[3] *Parliamentary Reports*, I, 605.
[4] *Reports, Commissioners*, 1783, XI, 228.
[5] *Commons Journals*, XIX, 674.

of Great Britain. In 1722 the House received a number of petitions, setting forth ". . . . that since the union with Scotland vast quantities of Tobacco have been imported thither from Virginia and Maryland. Great part whereof has been brought into that Part of Great Britain called England and sold at such Prices as to give just Ground to believe that the several Duties payable thereon have not been duly collected." [1]

In January 1723 a Committee reported on these petitions. Evidence was given before it to show that English merchants were being undersold in London by tobacco imported from Scotland; although the lowest price for which it could be imported, duty paid, was 7*d.* the pound, duty being 5½*d.* with the discount, this Scotch tobacco sold for 6*d.* and even 5*d.*

The merchants of the north were not silent; they pointed out that they were losing money, and explained to the committee that " . . . the reason Tobacco from North Britain sold at such low prices is That one Robert Cowan, who sold almost all the low-priced Tobacco that was sold in London, contracted in Glasgow for Tobacco at 7*d.* and 7½*d.* per pound, and sold it at 6*d.* and 6½*d.*, but that the said Cowen is since become insolvent." [2]

The Customs statistics are more elucidating than the Scotchmen. On the following page of the report we find :—

" Imports;	" Exports;
" Glasgow, Mar. 1721–22	" Glasgow, May 1721–22
7,344 hogsheads, or 3,303,316 pounds."	2,669 hogsheads, or 1,721,854 pounds."

We are not concerned with quantities, but with the average weight of hogsheads on importation and on exportation. The average weight on import is approximately 450 pounds per hogshead, on export the average weight is 750 pounds.

At the port of entry the land-waiter was in collusion with the importer, and recorded weights as much as he dared below the actual weight. On this quantity, as recorded in the land-waiter's book, duty was paid. By exporting to foreign parts nearly as much as he entered, the merchant received his drawback or cancelled his bonds, and so received the whole of the excess duty-free. Of this remainder the greater part found its way to England. Any price over the cost of transportation was sheer profit.

Before the Union the consumption of tobacco in Scotland was over two million pounds annually, and was probably

[1] *Commons Journals*, 1722, XX, 63, 64. [2] *Commons Journals*, XX, 104.

increased by 1722, yet it appears that Scotland, in three years, "besides what she consumed at home, supplied England with nearly four million pounds more of tobacco than that which she paid duty for." [1]

Further investigations by the customs authorities revealed that the Scots were not the only offenders in this way; the system flourished in England also, and reporting the following year the committee were able to educe a number of examples. Moreover, a further system of fraud by misstatement of weight was found to be flourishing. Drawbacks were paid to the full amount of the duty to enable the English merchant to compete in the foreign market. The tobacco to be exported was weighed and inspected by "searchers." But the searchers, like the tide-waiters, were approachable, and if not could frequently be deceived, so that the possibility of fraud was doubled. The committee found examples of damaged tobacco, adulterated stuffs, tobacco weighted with rolls of lead, sand, syrups and what not, which had claimed and received the full drawback. The evidence suggests that there must have been an average under-statement of some 30 per cent. on import, and an over-statement of 20 to 25 per cent. on export. In this way "honest" merchants competed with the smugglers.[2]

Adulteration, while it cannot be said to increase the amount of tobacco itself, does increase the bulk of the total mixture, and affects the quantity of tobacco consumed by the substitution, so that some discussion of it is pertinent here. As early as 1615 a writer on tobacco says of the imported Spanish: "... it is hard to find one pound weight in five hundred that is not sophisticate. The blacke colour which it hath and for which our Shoppe-keepers praise it is Artificiall, yea all tobacco (Saint Domingo tobacco excepted) ... is noynted and slobbered over with a kind of iuyce or syrope," and names a number of adulterants used: salt water, "dregges of sugar," black honey, Guiana pepper, "leeze of wine," a red berry called "Anotto" and other berries.[3]

In 1716 a committee report was laid before the House of Commons dealing with the abuses of the tobacco trade. It was shown before the committee that great quantities of leaves of walnut and chestnut trees and hop leaves were annually cut and stripped, to be mixed with tobacco, or sold unmixed as tobacco. One John Sheffield had made this his business, and sold his sham

[1] *Commons Journals*, XX, 107–8.
[2] *Reports, Commissioners*, 1733, I, Appendix 26.
[3] C. T., *An Advice how to Plant Tobacco*, etc., p. 3.

tobacco to the trade. He had occupation for six men, and the estimated output of his establishment was 20 cwt. per week. The product was generally mixed with tobacco and sold retail about twelve pence the pound.[1]

For this earlier period it is not possible to get definite information about adulteration. Until the middle of the nineteenth century chemical analysis was very uncertain, and if the adulterant was not noticeable to the unaided eye, one might adulterate with impunity. Even the detection of foreign material, such as leaves of trees or sand, was difficult. Snuff was particularly liable to adulteration, and was always mixed with earths, alum or concoctions to make it more pungent. Only by grating his own supply could the snuff-taker be sure of getting it pure. It is probably safe to assume that adulteration was general throughout the eighteenth and earl part of the nineteenth centuries.

The Excise Survey, introduced in 1789, acted as a deterrent for some fifty years, and kept adulteration within bounds. The manufacturer would not display quantities of adulterant unnecessarily when an Excise man might be about at any time, and was probably cautious in its use.

By the Act of 1821 [2] the only ingredient permitted was water, or water tinged with colour. But the Act that abolished the Excise Survey in 1840,[3] abolished these restrictions and forbade only "leaves, herbs or plants, cut, coloured, stained or manufactured to resemble tobacco." This application of *laissez-faire* did not last long. Manufacturers quickly took advantage of the new privilege and the removal of the spying Exciseman. Even the forbidden adulterants were used more freely. The effect on the revenue was immediate, and two years were enough to convince the Government of its mistake and to bring back the old restrictions.[4] With the establishment of the laboratory in Somerset House in 1843, the Government was able to pass such a law with some prospect of its enforcement. Prosecutions were numerous at first, but eventually had the desired effect, and by 1850 adulteration was a thing relatively unimportant.[5]

Unfortunately the Government made one slip that played into the hands of the smugglers. It forgot that some people liked sweetened and flavoured tobacco. The demand remained, and smuggling received an impetus. Not until 1863 was this mistake corrected, when Gladstone provided for the manufacture in bond of sweetened Cavendish and Negrohead.

[1] *Commons Journals*, XVIII, 410–421. [2] 1 & 2 Geo. IV, c. 109, s. 14.
[3] 3 & 4 Vict., c. 3, s. 18. [4] Dowell, 261; 5 & 6 Vict., c. 90, s. 19.
[5] *Accounts and Papers*, 1844, XII; Dowell, p. 262.

Except in small quantities, smuggling too has become a thing of the past. At the close of the Napoleonic Wars the Government was able to give its attention to the restriction of smuggling. New methods of communication made success possible ashore, and the Navy took over the work afloat.[1] In 1857 the Commissioners of the Customs reported ". . . smuggling has greatly diminished, and the public sentiments with regard to it have undergone a very considerable change. . . . Smuggling proper is now almost entirely confined to tobacco, spirits and watches. . . ." [2]

A certain quantity of tobacco is still smuggled ashore from ships in ports, chiefly by sailors and stewards, and within the last twenty years the fishing fleets have been responsible for running some, which they have occasionally been able to buy from small foreign vessels which visit them for that purpose. The total quantity must be inconsiderable, perhaps a hundred thousand pounds, but scarcely more.[3]

The cultivation of tobacco has been permitted in England since 1910, when the Act of 1661 was repealed, but the quantities produced have seldom exceeded 50,000 pounds a year, and the total production for the United Kingdom has never reached 200,000 pounds; the peak of production was in 1915, when 187,942 pounds were charged with duty. For 1923 the amount produced was just over 20,000 pounds.[4]

Summarising the more reliable of the statistics for the earlier period, the rapidity with which the use of tobacco spread after its first introduction is shown :—

Year.	Total Imports (pounds).	Home Consumption (pounds).
1602	16,000 (London)	—
1610	60,000	—
1614–1621	—	140,000 (av.)
1628	—	400,000
1632–1634	—	600,000 (av.)
1637–1640	1,800,000 (av.)	—
1689–1693	15,000,000 (London, av.)	—
1699–1709	28,000,000 (av.)	11,300,000 (av.)
1731	15,800,000 (London)	—
1732	32,000,000	5,200,000
1737–1743	47,500,000 (av.)	—
1744–1746	40,000,000 (av.)	7,000,000 (av.)
1762–1770	50,000,000 (av.)	—
1770	70,000,000	10,000,000
1775	101,800,000	27,000,000
1775–1782	23,600,000	5,000,000 (av.)
1786	—	6,800,000

[1] Shore, Part III, Chapters V to VII.

[2] *Customs Commissioners' First Report*, 1857, p. 39.

[3] *Reports, Commissioners of Customs*, 1906 and succeeding years.

[4] Treasury Committee, 1923.

The second column of the table on p. 71 brings out the apparent drop in home consumption between 1700 and 1770. The figures for 1732 and 1744 to 1746 are indicative of the great amount of smuggling and fraud at that time. The exceptionally high figure for 1775 is explained by the fear of a shortage due to the political situation. It will be remembered that this figure was derived by subtracting imports from exports, and really represents the amount added to existing stocks in the course of the year. During the struggle with the colonies supplies ran short, and some tobacco was again cultivated in England, and extensively in Scotland and Ireland. The figures for *per capita* consumption after 1785 (see tables) are very regular, and seem to indicate an actual diminution in the amount of tobacco consumed rather than a great amount of smuggling or fraud. This explanation we know to be consistent with the facts. The effect of the war of 1812 is marked both in consumption and price, and four years previously the price shows the effect of the American embargo. (Table A.)

TABLE A.

GREAT BRITAIN.

Year.	Entered for Home Consumption, million pounds.[1]	*Per capita* Consumption in pounds.[2]	Main Rate of Duty.[3]	Price in Bond.[3]	Year.	Entered for Home Consumption, million pounds.[1]	*Per capita* Consumption in pounds.[2]	Main Rate of Duty.[3]	Price in Bond.[3]
			d.	*d.*				*d.*	*d.*
1786	6·8[3]	0·7	10	4	1806	12·4	1·1	26½	6
1787	6·7[3]	0·7	15	3½	1807	12·4	1·1	26½	6
1788	6·9[3]	0·7	15	3½	1808	12·9	1·1	26½	13½
1789	8·2	0·8	15	3½	1809	13·1	1·2	26½	11
1790	9·0	0·9	15	3	1810	14·1	1·2	26½	8
1791	9·3	0·9	15	3	1811	14·9	1·2	26½	6
1792	9·0	0·9	15	3½	1812	15·0	1·2	28½	6
1793	8·6	0·8	15	3½	1813	13·6	1·1	32	14
1794	9·7	0·9	15	4	1814	10·5	0·8	32	27
1795	11·0	1·0	15	4½	1815	13·2	1·1	38	18
1796	10·0	1·0	19	6	1816	12·8	1·0	38	12
1797	9·8	0·9	19½	9	1817	13·6	1·0	38	12
1798	10·3	1·0	19½	12	1818	13·7	1·0	38	10
1799	11·0	1·0	19½	9	1819	12·9	1·0	48	8
1800	11·8	1·1	19½	6	1820	13·0	1·0	48	7
1801	10·5	1·0	19½	5½	1821	13·0	0·9	48	5½
1802	12·1	1·1	19½	5	1822	13·0	0·9	48	5½
1803	12·6	1·1	19½	5½	1823	13·4	0·9	48	5
1804	12·3	1·1	20½	6	1824	13·1	0·9	48	5
1805	12·6	1·1	20½	5½	1825	14·5	1·0	36	5½

[1] *Parliamentary Reports, Accounts and Papers*, 1829, XXV, 373.
[2] Estimated.
[3] *Marshall Dictionary*, p. 203.

TABLE B.—United Kingdom.

Year.	Entered for Home Consumption, million pounds.	Duty Paid, £000,000.	Main Duty, per pound.	*Per capita* Consumption, pounds.[1]	*Per capita* Duty Paid to nearest penny.[1]
			d.		*d.*
1815	18·0	2·4	38	0·9	31
1816	17·5	2·9	38	0·9	35
1817	18·4	2·8	38	0·9	34
1818	17·9	2·9	38	0·9	35
1819	16·4	2·9	38	0·8	35
1820	15·6	2·9	48	0·8	34
1821	15·6	3·2	48	0·7	37
1822	16·3	3·1	48	0·8	36
1823	17·0	3·3	48	0·8	37
1824	16·8	3·4	48	0·8	37
1825	18·7	3·4	48	0·8	37
1826	17·7	3·3	36	0·8	36
1827	18·7	2·7	33	0·8	30
1828	18·6	2·8	33	0·8	29
1829	18·9	2·8	33	0·8	29
1830	19·4	2·9	33	0·8	30
1831	19·6	2·9	33	0·8	30
1832	20·3	3·0	33	0·8	29
1833	20·8	3·1	33	0·8	30
1834	21·3	3·2	33	0·9	31
1835	22·1	3·2	33	0·9	31
1836	22·5	3·4	33	0·9	33
1837	22·6	3·4	33	0·9	33
1838	23·5	3·4	33	0·9	32
1839	23·2	3·6	33	0·9	33
1840	23·1	3·5	33	0·9	33
1841	22·1	3·6	34½	0·8	33
1842	22·2	3·6	34½	0·8	32
1843	23·0	3·6	38	0·9	32
1844	24·6	3·7	38	0·9	33
1845	26·2	4·0	38	1·0	36
1846	26·9	4·2	38	1·0	38
1847	26·7	4·3	38	1·0	39
1848	27·3	4·3	38	1·0	38
1849	27·7	4·4	38	1·0	38
1850	27·7	4·4	38	1·0	38
1851	28·1	4·4	38	1·0	38
1852	28·6	4·5	38	1·0	39
1853	29·6	4·6	38	1·1	39
1854	30·4	4·8	38	1·1	41
1855	30·3	4·8	38	1·1	41
1856	32·4	5·2	38	1·2	44
1857	32·7	5·2	38	1·2	44
1858	33·9	5·4	38	1·2	45
1859	34·6	5·6	38	1·2	46
1860	35·2	5·7	38	1·2	46
1861	34·8	5·6	38	1·2	45
1862	35·4	5·7	38	1·2	46
1863	37·4	6·0	38	1·3	48
1864	38·0	6·1	38	1·3	49
1865	38·9	6·2	38	1·3	49
1866	40·5	6·5	38	1·4	51
1867	40·7	6·5	38	1·4	51
1868	41·0	6·5	38	1·4	51
1869	41·4	6·6	38	1·4	51
1870	41·4	6·6	38	1·3	51
1871	42·5	6·6	38	1·4	50
1872	43·7	6·8	38	1·4	51
1873	45·5	7·0	38	1·4	52
1874	46·6	7·3	38	1·4	54
1875	47·8	7·4	38	1·4	54
1876	48·5	7·7	38	1·5	56
1877	49·1	7·8	38	1·5	56
1878	48·9	8·0	38	1·4	57
1879	47·2	8·5	42	1·4	60
1880	48·3	8·6	42	1·4	60
1881	49·3	8·7	42	1·4	60
1882	50·0	8·8	42	1·4	60
1883	50·6	8·9	42	1·4	61
1884	51·7	9·0	42	1·4	61
1885	52·5	9·3	42	1·5	62
1886	52·3	9·3	42	1·4	62
1887	53·2	9·4	42	1·5	62
1888	54·4	8·7	38	1·5	57
1889	56·0	8·9	38	1·5	58
1890	58·1	9·1	38	1·6	58
1891	60·9	9·5	38	1·6	61
1892	62·6	9·9	38	1·6	63
1893	62·5	10·1	38	1·6	63
1894	64·5	10·1	38	1·7	63
1895	65·2	10·4	38	1·7	64
1896	68·1	10·7	38	1·7	64
1897	69·8	11·0	38	1·7	66
1898	73·5	11·4	38	1·8	68
1899	76·7	11·0	32	1·9	64
1900	80·1	10·9	36	2·0	64
1901	78·4	12·8	36	1·9	73
1902	80·7	10·6	36	1·9	61
1903	81·9	12·5	36	1·9	70
1904	83·4	12·6	36	2·0	70
1905	84·8	13·2	39	2·0	73
1906	86·1	13·4	39	2·0	74
1907	89·4	13·3	36	2·1	73
1908	90·0	13·7	36	2·0	75
1909	87·6	13·8	36	2·0	75
1910	90·0	15·7	44	2·0	84
1911	93·1	17·2	44	2·1	92
1912	93·4	17·3	44	2·1	92
1913	95·9	17·3	44	2·1	91
1914	101·0	18·3	44	2·2	95
1915	108·0	19·3	44	2·3	101
1916	102·9	25·7	66	2·2	132
1917	105·5	27·3	66	2·3	141
1918	107·3	33·3	77	2·4	170
1919	145·3	46·2	98	3·2	236
1920	139·1	60·9	98	3·0	311
1921	136·7[2]	55·6[2]	98	2·9	281
1922	136·1	55·2	98	2·9	279
1923[3]	125·7	50·8	98	2·9	283
1924[3]	128·8	51·9	98	3·0	290

[1] Figures for *per capita* consumption and *per capita* duty paid are derived directly from those for total home consumption and total duty paid, and discrepancies between them are due to differences in the period for which the latter are given. They will be found to average out over a period of several years (see text).

[2] Figures to 1920 from *Accounts and Papers;* 1921 to 1924 from *Reports Commissioners of the Customs.*

[3] Great Britain and North Ireland.

The importance of tobacco to the revenue is shown in the column marked "Duty paid" (Table B). In the thirty years from 1890 to 1920 the consumption of tobacco was doubled, but the revenue from it increased fivefold. The increased consumption and duty prove that tobacco is an important item in the budget of the average family.

The years given in the tables are not calendar years, and are not always for the same twelve months in the different columns. It will frequently happen that the duty has been changed once or twice in the course of a year at a date nowhere near the end of a financial year, or that the figures for duty received will be for the financial year, and those for tobacco retained for home consumption for quite another period. Again, it should be remembered that tobacco is drawn out of bond only as required for manufacture and sale, but that there is bound to be a great deal of forestalling should the duty be raised and of holding over should a reduction in duty be anticipated.

The column marked "Main duty" gives the rate to which the greater part of imported tobacco is subject. The figures for *per capita* consumption are official for the period after 1855, with the exception of the war years. These latter and those for the period before 1855 have been estimated by the writer.

ALFRED RIVE

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THE ECONOMY OF A NORFOLK PARISH IN 1783 AND AT THE PRESENT TIME

It is seldom that the opportunity is presented of placing in juxtaposition the agricultural and social economy of a defined area in modern times and in the last quarter of the eighteenth century. In the case of a certain Norfolk village, however, this operation can be carried out in very full detail, for, not only are records of the occupation, size, cropping and yield of every field, over a period of several years, extant, but there is also available, on the one hand, an estimate of the total value of the produce of this land, and on the other, corresponding figures for all the outgoings of its cultivators in respect of tithe, local rates and national taxation. Thanks to information kindly furnished by the Ministry of Agriculture, augmented by personal investigation on the spot, figures relating to the situation in the year 1923 have been secured, thus making possible a direct comparison between eras separated by some hundred and forty years—a period which, from the national standpoint, exactly spanned the two great conflicts and all that was implied by the advance of industry, and, locally, the struggles of arable farming to maintain its existence during three periods of acute depression.

The village in question is Mattishall, situated some eleven miles west of Norwich, and the preservation of this precise description of its former condition is due to the painstaking work of an incumbent with the not uncommon name of John Smith. The living was, and still is, in the gift of Gonville and Caius College, Cambridge, having been in the patronage of that body since the year 1370. This Vicar, himself a former Fellow of the College, held the cure from 1781 until his death in 1803, and was in the habit of recording annually (with the primary object of securing his tithe), the very minute details referred to above. His repository was a vellum bound note-book, which is preserved in the College treasury.

It should, perhaps, be premised that Mattishall is situated on the undulating ridge which extends north-westwards towards Fakenham, that it comprises heavy soil, is even nowadays in-

accessible except by means of secondary roads, and still looks to Norwich as its market centre for the sale of both grain and live-stock. By the census of 1911 the population numbered 738, and the area of the parish in 1923 amounted to 2221 acres, having a net rateable value of £3630 15*s*., of which sum the land accounted for £1823 15*s*., and buildings and other property £1807. For the moment, these modern statistics will suffice, and investigation into the former condition of the parish can be pursued, but it may be noted that no alternative forms of employment have arisen, and agriculture consequently still represents its sole industry. Mattishall was unenclosed during practically the whole of Mr. Smith's incumbency, the local Act taking effect in 1801, when, according to G. Slater (*English Peasantry and the Enclosure of the Common Fields*), 1100 acres were dealt with out of a total area which at that date must have amounted to approximately 2100 acres. The year 1783 has been selected as being typical of the rest, and as having the advantage of being uninfluenced by the war. At that date the area of land comparable with the modern expression " under crops and grass " amounted to 1421 acres, made " by a mensuration between Michaelmas and Christmas . . . including the fences of the different enclosures to the bottoms of the hedges " —so exact was the Vicar! Of this total, 1056 acres were arable land and 365 permanent grass. In addition, there was the common, which, apart from affording facilities for grazing and fuel-gathering, was not definitely productive. The bulk of the Vicar's book, which extends to over two hundred pages, is devoted to an analysis of the successive croppings of the 425 " fields " into which the plough-land was divided; the exact size of each of these plots is recorded, even the number of perches being minutely stated. Other sections comprise elaborate calculations into the value of the products raised by each occupier and the amounts of their several payments in tithe, their assessments to the Poor Rate, the sums collected for Land Tax and for the different forms of national taxation, and also a schedule of occupations. Before quoting these figures and placing them side by side with their modern counterparts, it may be of interest to give an extract from Mr. Smith's own description of the agricultural practices then followed in Mattishall.

" The farmers in the parish of Mattishall generally divide their arable lands into shifts, or parcels, which are nearly equal in quantity, and are cultivated in the following manner. One shift, after lying fallow from harvest to the succeeding Midsummer, is sown with turnips; another with barley or oats; a third with

clover, nonsuch or peas, and a fourth is sown with wheat. But as they sometimes let a small part of what is laid down with clover or nonsuch continue in that state for two years, the number of acres thus cultivated seldom amounts to an entire fourth part of their arable land, but falls short of it, perhaps in the proportion of one acre in twelve. And as they frequently sow barley or oats after their wheat, the number of acres sown with those grains, thus, in some measure, coming in succession twice in five years, namely, after both turnips and wheat, will of course exceed one quarter of the arable land, and will, I believe, be generally found to amount to about three-tenths of it. But to explain the course of husbandry in a still clearer and fuller manner, we will suppose a farmer to occupy one hundred acres of arable land. He will in that case have about 22 acres of turnips, 30 acres of barley and oats, 26 acres laid down with clover or nonsuch or sown with peas, and 22 acres of wheat. The pasture ground is mostly used for the purpose of keeping cows, young stock and horses employed in husbandry, one-fifth only of the whole being saved for hay. But the produce of this quantity of land being by no means sufficient to maintain the cows and other stock during the winter, it is necessary to supply the deficiency with turnips, on which the cows are generally, if not wholly, fed during that season. And these, being drawn for that purpose, become a very valuable tithe to the Vicar, as he is not only indisputably entitled to the tithe of the turnips themselves, but likewise to that of the milk, produced in great abundance by the cows that are fed upon them. Besides the tithes of corn, hay, clover, turnips, milk and calves, there are many other articles, the tithes of which are of considerable value, such as sheep, young stock, geese, pigs and fruit. The three first of these are chiefly kept, during the summer, upon the common. After harvest they are turned on to the stubbles, off which the geese are taken at Michaelmas almost fit for the market, and the sheep and young stock are kept during the winter chiefly upon turnips, a small part of which are eaten upon the land by the former, and the latter are fed upon them when drawn."

Here, then, in 1783 the Norfolk rotation was fully adopted, and no doubt justified the words of the author of *The Farmer's Tour through the East of England*, who declared that "this is a noble system, which keeps the soil rich . . . the land under such management cannot possibly be either poor or foul." Modern agriculturists would, however, welcome some fuller account of the yields secured from turnips sown at Midsummer on land which

cannot have been adequately manured; the suspicion that their dimensions must have been meagre is added to by the fact that Mr. Smith never appraised their actual weight.

The following table may now be introduced to show the use made of the land at the two periods under review. It should be explained that the figure of 1936 acres in the year 1923 represents the agricultural land (" lands under crops and grass "), the excess of some 500 acres over the 1783 total being attributable to the enclosure of the common. The earlier figure admittedly includes cottagers' gardens and certain other small plots, which in the aggregate can have represented only a very small area, while at the present time holdings of an acre in extent and below are excluded. The disparity between the total areas is regrettable, but the inclusion of the common in the area devoted to farming practice would have been misleading, and, if the percentage columns are utilised as the basis for direct comparison, there is no danger of ambiguity arising.

	1783.		1923.	
	Acres.	Percentage of total area under crops and grass.	Acres.	Percentage of total area under crops and grass.
Area under crops and grass	1421	—	1936	—
Arable land	1056	74·3	1589	82·1
Permanent grass	365	25·7	347	17·9
Wheat	238	16·7	276	14·3
Barley	231	16·3	448	23·2
Oats	67	4·7	49	2·5
Peas	106	7·5	8	0·4
Beans	0	—	22	1·1
Mangolds	0	—	137	7·1
Turnips	200	14·1	194	10·0
Temporary grass	123	8·6	428	22·1
Other crops, gardens, orchards, fallow	91	6·4	27	1·4

It will be agreed that the present use made of the soil a Mattishall, excluding for the moment the all-important factor of the rate of yield secured per acre, is not widely dissimilar from that in vogue in 1783. Naturally, the modern Norfolk tendency towards a larger production of barley is evidenced, and, although beans have appeared in the parish, the combined area under secondary cereals has declined; if turnips were the only choice in " roots " a hundred and forty years ago, they are now rivalled

by mangolds. The main distinction between the distribution of crops at the two periods is to be found in the present-day adoption of temporary grasses, which has caused a net increase in the total area of grass available for feeding purposes either directly or as hay. In 1923 it will be seen that 40 per cent. of the farmed land was under some form of grass, in 1783 this figure was 34·3 per cent. Incidentally, the reduction, not only in the proportionate, but also in the actual acreage of permanent grass demonstrates clearly the economic impossibility of "reverting to grass" in these low rainfall areas of East Anglia.

If animal husbandry is taken as a fresh basis for comparison the following table can be prepared :—

	1783.		1923.	
	Nos.	Per 100 acres.	Nos.	Per 100 acres.
Cattle	310	21·8	334	17·2
Sheep	1000	70·4	459	23·7
Pigs	300	21·1	712	36·8
All live-stock . . .	1610	113·3	1505	77·7

These figures accurately reflect the post-war tendency towards increasing the numbers of pigs on arable farms, and also show that the folding of sheep on heavy land is not a modern practice. Since the figures for the present date exclude live-stock on holdings below an acre in extent, it is probable that the number of pigs now kept by Mattishall villagers would considerably augment the total recorded for this type of animal; in other respects they afford an accurate basis for comparison, with the one reservation that all animals formerly derived a small, but unassessable, benefit from grazing on the common. Again, mere numbers give little indication of the potential output of the industry at each date, for the comparative yields of milk, meat and wool cannot be brought under review.

The human element may now be considered. In 1783 there were 62 householders, so that the population may be assumed to have amounted to between 280 and 300 persons. Of this total 28 were definitely associated with the cultivation of the land, either as "farmers" or "labourers," but, as will be shown in a moment, this figure by no means represents the sum of the male villagers engaged in husbandry, for neither the sons of farmers employed on the land nor, still more important, the small-holders with other and subsidiary trades were thus classified. In 1923,

according to figures supplied by the Ministry of Agriculture, there were 76 whole-time male workers in agriculture, or, including casual hands, a total of 91; the former figure represents a density of employment of 3·9 workers per hundred acres—a favourable rate, and one which is in close agreement with statistics relating to similar arable districts. Assuming that the 41 farms enumerated below were in separate occupation, the total number of "persons engaged" in agricultural work is now 117, or almost exactly six per hundred acres, a figure that is once more in conformity with expectation. There were at least 44 separate "farmers" in 1783, who, with the addition of their ascertainable labourers, formed a total of some 60 persons, or a little over four persons per hundred acres. These last figures are admittedly problematical, for information is lacking to show whether any extraneous workers from neighbouring parishes were labouring on Mattishall farms; and, again, the number of labourers' sons employed is unascertainable. It would seem, however, that more persons per acre are now engaged in the local agriculture than was the case 140 years ago, and that a population of rather more than double the size is supported.

If the numbers and sizes of the holdings themselves are analysed a very interesting tabular statement can be presented.

Size-group.	1783. No.	1923. No.
Above 1 and under 5 acres	11	8
Above 5 and under 20 acres	19	12
Above 20 and under 50 acres	5	7
Above 50 and under 100 acres	3	8
Above 100 and under 150 acres	5	4
Above 150 and under 300 acres	1	2
Total	44	41
Average size (acres)	32	47

Whilst the pitfalls contained in the above table are patent to anyone familiar with the handling of agricultural statistics, it does, however, afford a certain indication of the distribution of the farmed land at each period. The size-groups are, of course, those adopted by the Ministry of Agriculture, which excludes from its annual review any holding of, or below, an acre in extent; it is also highly probable that, in the case of the year 1923, several of the undertakings included in the smallest size-groups were gardens rather than farms in the strictest sense of that word. Equally, in 1783 the grand total of all separate payers of tithe

amounted to 55, this addition of 11 to the total of 44 being occasioned by the inclusion of several " farms " of an acre or less in extent, as well as by the deliberate exclusion from the table itself of plots designated by the Vicar as "gardens." Numerically, therefore, the comparison is a fair one, provided that it is borne in mind that only holdings above a certain size are included, and, in reference to the figure quoted as that of the average farm, that the area of farmed land was, in the first instance, 1421 acres, and at the later date 1936 acres. The increase of almost 50 per cent. in the size of that fictitious and unsatisfactory entity, the " average holding," is due to the modern tendency for the numbers of very small farms to decline, rather than to any augmentation in the number of those above 100 acres in size, although it might be argued that, at enclosure of the common, preference had been shown to the larger undertakings. Forty-seven acres is not only well below the " average size " of English farms (66 acres), but also represents a decidedly smaller undertaking than the corresponding figure (76 acres) for Norfolk as a whole. What certain contemporaneous authorities would have thought of the distribution of land in Mattishall 140 years ago can be judged by referring again to the *Farmer's Tour*, whose writer had notoriously little predilection for the small farmer :—" Thus, it will at once be apparent that no small farmer could effect such great things as have been done in Norfolk. Inclosing, marling and keeping a flock of sheep large enough for folding belong absolutely and exclusively to great farmers. None of them could be effected by small ones—or such as are called middling ones in other countries. Nor should it be forgotten that the best husbandry in Norfolk is that of the largest farmers. You must go to a Curtis, a Mallet, a Barton, a Glover, a Carr, to see Norfolk husbandry. You will not among them find the stolen crops that are too often met with among the little occupiers of a hundred a year in the eastern part of the county. Great farms have been the soul of Norfolk culture ; split then into tenures of a hundred pounds a year, you will find nothing but beggars and weeds in the whole country. The rich man keeps his land rich and clean." There were certainly no Curtises, no Mallets, no Bartons, no Glovers or Carrs at Mattishall, for the largest farm covered 174 acres. " The little occupiers of a hundred a year " were here the giants of the industry, and such insignificant fry as the occupiers of from one to twenty acres would have been beneath the notice of our authority, but that they were numerically well represented in such a purely arable district as West Norfolk is interesting. The list of occupations

given in Mr. Smith's book, however, makes it obvious that practically every small man had other means of sustenance, for such designations as "carrier," "inn-keeper," "wheelwright" and "cordwainer" must have been synonymous with "small-holder." The experience of other countries and later periods has testified to the wisdom, if not to the economic necessity, of providing such additional forms of livelihood.

It may be of interest to record briefly the agricultural practices followed by the different occupiers. Here the outstanding feature to note is that the smallest farmers were, in 1783, producing crops similar to those of their larger rivals, and producing them in almost similar proportions; this is particularly noticeable in the case of cereals, and appears to have been free from any association with open-field cultivation, as detached enclosures were cultivated on the same lines. The commentary of the present-day agriculturist is that they obviously lacked their successors' stand-by in the shape of vegetables, small fruit and, to a lesser extent, pigs. For example, one J. Allen produced 2 acres, 1 rood, 16 poles of oats, and 2 acres, 1 rood, 10 poles of clover. F. Bush raised 1 rood, 16 poles of wheat and a similar acreage of oats; James Cobb had 2 roods, 1 pole of barley; J. Hubbard 1 acre, 2 roods, 17 poles of wheat, and 2 acres, 2 roods, 1 pole of oats, and so on throughout the inventory. As many as nine farmers kept sheep, but twenty-seven supported cows, even some holders of less than an acre managing to provide for one apiece. Only eleven possessed pigs, and these were often not found in the smallest class; geese were evenly distributed, both large and small-scale farmers relying mainly on the common for their feeding and on the stubble for their autumn fattening. As this was not light soil, sheep were valued rather for their wool than for manurial purposes, and the relatively small number of lambs annually produced by the flock indicates that considerable numbers of hoggets were retained.

It will naturally be asked how the rates of yield compare with present-day standards. Mr. Smith, with great industry, estimated these weights for each cereal and also for hay, preparing separate figures for every individual payer of tithe. The upshot is that, taking the average of five successive years, the yield of wheat comes out at 22 bushels, of barley 29 bushels, of oats 32 bushels, of peas 20 bushels and (on one occasion) of beans 28 bushels. Oats provided the most regular crop, while barley fluctuated considerably above and below the level of 29 bushels. Corresponding figures for the principal cereals raised in Mattishall at

the present time are as follows:—wheat 32 bushels, barley 36 bushels and oats 56 bushels. Any reliable figures dealing with the rate of yield of cereals in bygone periods are always of considerable value; these particular examples are not at variance with the reports of Marshall, Young and Kent, and serve to emphasise the generally accepted statement that the bulk of improvement recorded by the time of high farming in the 'fifties of the next century was applicable to wheat and oats. It may be added that the yields obtained by the small farmers compared favourably with those of their larger neighbours.

Having surveyed the agricultural economy of the village, it is now possible to investigate the value of its output; here a double operation can be simultaneously performed, for the figures prepared by the Vicar enable one to assess the drain on the industry which his own tithe represented.

> "An estimate of the quantity and value of the corn and other tithes produced in the parish of Mattishall from Michs. 1783 to Michs. 1784." (The values were those "current in Norwich market at the time.")

	Total value.			Value of tithe.		
	£	*s.*	*d.*	£	*s.*	*d.*
238a. 3r. 8p. of wheat at 5 combs per acre (1194 combs at £1 2*s.* per comb)	1313	8	0	131	6	9½
231a. 2r. 3p. of barley at 8 combs per acre (1852 combs at 10*s.* per comb)	926	0	0	92	12	0
67a. 1r. 12p. of oats at 8 combs per acre (538 combs at 9*s.* 2*d.* per comb)	246	8	8	24	12	10½
106a. 3r. 18p. of peas at 3 combs per acre (321 combs at 13*s.* 6*d.* per comb)	216	12	0	21	13	2¼
83a. 1r. 25p. of nonsuch at 30 combs per acre (2500 combs at 3*s.* per comb)	375	0	0	37	10	0
40a. 3r. 37p. of clover at 30 combs per acre (1228 combs at 3*s.* per comb)	184	4	0	18	8	4¾
72a. 1r. 13p. of hay at 30 combs per acre (2170 combs at 3*s.* per comb)	325	10	0	32	11	0
200a. of turnips at £2 per acre	400	0	0	40	0	0
4a. 1r. 2p. of buckwheat ploughed in		—			—	
2r. of hemp at £4 per acre	2	0	0	0	4	0
2a. 1r. 10p. of gardens at £10 per acre	23	2	6	2	6	3
160 cows at £6 each	960	0	0	96	0	0
150 young stock, the agistment of which at £1 per head p. a. comes to	150	0	0	15	0	0
800 sheep at 1*s.* 6*d.* for wool	60	0	0	6	0	0
200 lambs at 6*s.* each	60	0	0	6	0	0
500 young geese at 1*s.* each	25	0	0	2	10	0
500 geese bought by the farmers and improved by shackage at the rate of 1*s.*	25	0	0	2	10	0
300 pigs at 2*s.* 6*d.* each	37	10	0	3	15	0
70 orchards at £1 each	70	0	0	7	0	0
Total	£5399	15	2	£539	19	6

While this inventory of titheable commodities, covering both rectorial and vicarial dues, does not embrace many which can be described as contentious, yet it demonstrates that Mr. Smith was determined to claim his rights upon such relatively unimportant items as the produce of gardens and orchards, as well as upon the "increment value" of young geese. One notes, however, that he generally failed to secure tithe on the honey produced in the parish—"what the value of it may be I am in no wise able to determine"—apparently it was too risky an undertaking closely to investigate the hives! It must be observed that cash payments were accepted in all cases, and that tithing in kind was not practised. The sum of £6 per cow was the agreed value of her milk and annual calf; there were only two hundred ewes in the flock of sheep, and each was credited with one lamb. Turnips escaped with a flat-rate payment, and there was, accordingly, no need to differentiate between those fed to stock on the spot and others drawn for subsequent consumption, a most prolific cause of lawsuits in other localities. In 1783 the weight of corn connoted a yield slightly below the average.

The gross value of the output of these 1421 acres of Norfolk soil works out at £3 16*s.* per acre; subsequent years naturally produced higher figures, as the Vicar in 1801 proudly referred to his tithe as being worth upwards of £600 per annum, and added that, though the living had been "for a long time despised, and more than once, I believe, refused by all the Foundation Fellows of Caius College, it is but little, if at all, inferior to the best preferment in the patronage of that society."

So far as certain cereal crops are concerned, it might be possible to effect a monetary comparison with the corresponding output in 1923, but any complete estimate would be out of the question, since live-stock and roots would call for a complex analysis. The only statement of real value would be that provided by the net profits secured at each period, and, for such a purpose, it would be necessary to ascertain the rents paid and the extent of the wages bills. If it were desired to pursue this question further, there exist two indirect methods of estimating the rental value of Mattishall land in 1783. The assessments to Poor Rate represented a net valuation of £1020, or slightly over 14*s.* per acre, but the former figure comprised a certain quantity of non-agricultural property; the error would not, however, have been important. Secondly, in *A Report on the Agriculture of Norfolk*, compiled in 1840 by R. N. Bacon, there is a table showing, for numerous farms, and over a period of many years, the relationship

between the value of their produce and the rents they commanded. Under varying economic conditions, and on different types of undertakings, the value of the output ranged between 6·2 times and 3·9 times the rent, giving an average figure for all holdings over fourteen years of 4·6. If this figure is applied to the case of Mattishall, a rental of some 16*s.* 6*d.* the acre results, a sum that (*pace* contemporary writers) would appear to be highly probable for this type of soil at the period in question, and one that harmonises well with the 14*s.* on the assessment basis. It may be noted in passing that the gross estimated rental value of the land alone at the present time is almost exactly 20*s.* the acre (£2247 on 2221 acres of land within the parish). If adjustment be made for the altered value of money, it would appear therefore that agricultural land in this part of Norfolk now commands approximately the same rental, since 20*s.* may be taken as equivalent to 15*s.* in 1783. With regard to labour, the position is more uncertain; all that can be said is that it must have cost at least 10*s.* per acre and may have amounted to over 20*s.* A present-day figure for comparable land would be 46*s.* per acre, or 34*s.* 6*d.* in 1783 values, thus affording clear evidence that an increase has occurred in the cost of labour disproportionate to the rest of the outgoings.

For other, and statutory, forms of expenditure there exist the means of effecting comparison between the two periods under review, since the Vicar's book contains an exact description of the payments to Land Tax, Poor Rate and national taxes, and, with the exception of the latter class, the equivalent present-day figures are available. With the addition of tithe the total disbursements under the three largest heads can then be placed side by side, as follows :—

	1783.			1923.
	£	*s.*	*d.*	£
Tithe	539	19	6	784
Land tax	199	15	0	104
Rates	83	5	0	1167

Certain features should be noticed. Thus, these sums represent the total payments made by all the individuals resident, or conducting their undertakings, within the respective parochial boundaries, and are not necessarily confined to " farmers " only. In 1783 rates were 1*s.* 9*d.* in the pound, in 1923 they were 10*s.* 4*d.*, but the modern agriculturist, reaping the combined benefits accruing from the 1896 and 1923 Rating Acts, escapes, in so far

as his land is concerned, with a quarter of the liability of his ancestors. Thus, at the present time the portion contributed by farm land, of the total of £1167, only amounts to £234, the balance coming from other forms of rateable property (buildings, tithe, etc.); to the above sum must also be added the grants received from the Exchequer under the two Acts. The figure of £784 under the head of tithe in 1923 is made up of Rectorial, or Impropriate, £488 and Vicarial £296; it would, of course, have been very largely augmented but for the post-war legislation which fixed the value of tithe at £109 3*s.* 11*d.* until 1926. In the first period Land Tax was assessed at the maximum rate of 4*s.* in the pound; it will be agreed that this historically suspect and agriculturally uneven tax was then a real "burden" in these East Anglian arable districts, where its incidence was especially marked. Redemption, combined with reduction in the rate of assessment, has now reduced its weight considerably. At neither time did other forms of direct national taxation seriously affect the situation of the Mattishall agriculturist, for it was only after 1799 that Mr. Smith troubled to give a list of the payments rendered under the now familiar heads of property, window, vehicle, dog, man-servant, and inhabited house duties; such of these as existed in 1783 would have weighed lightly on agricultural occupiers. Socially, however, the list in which they are given affords corroborative evidence that, apart from the Vicar himself, one "gentleman," a "widow lady," and "the surgeon," there were only farmers, their employees, and certain small tradesmen resident within the parish. Incidentally, that recent and delightful publication by Mr. John Beresford, *The Diary of a Country Parson*, which deals with life in the adjacent village of Weston, confirms this statement, for we learn that the diarist, the Rev. J. Woodforde, was on calling terms only with the Vicar, the widow, and the surgeon. There is little evidence that, in 1923, national taxation, as represented by Income Tax, need have seriously affected the agriculturists of Mattishall, for even if Schedule D was not adopted, there are, as was shown above, no farms sufficiently large to be inconvenienced by Schedule B. In an area such as the one under review, and in times such as the present, the Inland Revenue authorities can have no terrors for the East Anglian tenant-farmer, whatever their relationship may be with the owners of large properties.

If the three charges enumerated in the last table are reduced to an acreage basis, it appears that they amounted to 11*s.* 7*d.* per acre in 1783 (equivalent to 15*s.* 5*d.* in terms of 1923

values) and £1 1*s.* 3*d.* per acre in 1923. It may be urged that, in the latter year, only the rates paid on agricultural land should be included (when, by an odd coincidence, the figure remains at 11*s.* 7*d.*); in the absence, however, of means for distinguishing between the rateable value of land and of buildings in 1783, it would be impossible to repeat this procedure then. Further, what is really required is a figure which indicates the total charges on the whole area and community at each date, and that is precisely what is recorded in the first instance.

The economic and financial aspects of the agricultural condition of Mattishall at the two periods have been surveyed in the previous pages, but the writer makes no attempt to assess its comparative prosperity in 1783 and in 1923; he merely seeks to record the bare facts, and to leave to others the solution of this difficult problem. If a summing-up be demanded, it might be fair to suggest that this parish, in common with the rest of Norfolk, succeeded during more than a century and a third, punctuated with economic, climatic and national upheavals, in maintaining both its proportionate arable area and the number of its cultivators; it also doubled its dependent population, augmented its yield per acre of both grain and meat, and has recently, at a time of depression almost as severe as any which have gone before, made heavy payments to local, national and ecclesiastical taxation funds. At the same time it must not be denied that in this respect its agriculturists, in common with all others, have latterly received remissions considerable in weight and valuable in their peculiar incidence.

The writer's cordial thanks are due to Professor T. B. Wood, C.B.E., F.R.S., who drew his attention to the Vicar's book, and who may, therefore, be said to have initiated this article, to Mr. J. F. Cameron, M.A., the Bursar of Gonville and Caius College, to the Rev. E. Madoc Madoc, the present Vicar of Mattishall, who augmented the information relative to tithe, and to Mr. A. G. Randall, who supplied details of the modern rating of the parish.

J. A. VENN

THE SOCIAL EFFECTS OF THE AGRICULTURAL REFORMS AND ENCLOSURE MOVEMENT IN ABERDEENSHIRE

In Northern Scotland there is a marked difference between the respective effects of the enclosure of mainly pasture and mainly arable lands. The making of the hill sheep farms and the clearing of the straths is the most debatable point in Scots rural history; on the other hand, at least in Scotland north of the Forth, the enclosure of purely arable land came about so quietly that it is most difficult to trace the movement in any given district.

Although patches of cultivation are to be found in the straths of the centre and the West, the main arable districts of Northern Scotland lie along that shelf of lowland country, between the hills and the sea, that stretches up the East Coast. By the lie of the land the boundaries of the strip are clearly marked, but no civil divisions demarcate them, and it is therefore impossible to obtain exact data as to changes in population, etc., in these districts. I have selected Aberdeenshire as a fairly typical East Coast county, covering an unusually large proportion of the coastwise country, and, even in its hilly districts, comparatively little affected by the sheep-farming movement. At the end of the eighteenth century it seems to have been slightly exceptional in the number of smaller holdings, and nineteen-year leases seem to have been more general there than further north. But, for purposes of comparison, it has the great advantage that the agricultural reforms were largely introduced there between 1792 and 1846, the dates at which the First and Second Statistical Accounts—semi-official returns drawn up by the ministers of the Established Church in every parish in Scotland —were compiled.

As sources of information the Statistical Accounts have good and bad points. The ministers wrote as practical agriculturalists and with an intimate knowledge of their parishes. There was little of that fellowship of caste between laird and minister such as tended to exist between squire and parson. In the accounts for Aberdeenshire one comes across such terms

as "feudal prejudices," "mistaken submissiveness," "gothic services" (for labour dues), and the writers were quite frank if they thought leases too short, rents too high, or "meliorations" insufficient. On the other hand, the reports have their failings; some are very cursory and barely cover a page, many are vague, others show obvious bias. It is maddening to find how seldom the accounts in the two collections lend themselves to exact comparisons. Yet, on the whole, they fully bear out the more general picture given in the County Reports drawn up for the Board of Agriculture, and they often give that background and interpretation without which the most accurate of bare figures may be unprofitable or even misleading.

The histories of the change from open-field cultivation to modern arable farming in England and Scotland are very different. Perhaps this difference is best summed up in the differing meanings that in the eighteenth century attached to the word "enclosure" in the two countries. In England, besides meaning the actual fencing of a field, it is employed to denote the legal subdivision of land held in common. In Scotland the word was constantly employed by eighteenth-century writers in the first sense—almost as often in connection with plantings as with fields [1]—but, personally, I have never once come across its use in the second sense, *i.e.* that of the legal division of common land.

As a matter of fact, such formal divisions seem very rarely to have taken place. By a Scots Act passed in 1695 "anent the division of run-rig," the consolidation of such holdings were to be carried out by the Sheriff, and by another Act of the same year, the Court of Session was empowered to divide common lands. Individual Acts of Parliament were unnecessary. The Abstracts of the decisions of the Court of Session show that appeals under the first Act were rare, and that there were very few instances of the division of common lands north of the Forth. Apart from the shadowy layers of feudal superiorities it was not the custom of the country to own land in common. For instance, Anderson, in the Report to the Board of Agriculture for the County of Aberdeenshire, says that no land in that county is owned in common,[2] and on the whole the individual

[1] Cf. C. Fraser Mackintosh, *Letters of Two Centuries*. "We have got the Craig to the northward of the House of Dunain enclosed, and mean to have it planted directly with firs," p. 270.

[2] Anderson, Report on Aberdeenshire to the Board of Agriculture, p. 40. "Of commons in the strict sense of the word I know of none in the County. Indeed they are scarcely known in any part of Scotland unless a few belonging

statistical accounts of the parishes bear this out, the only examples being two pieces of land vested in boroughs and two unimportant "Commonties"—a Scots term that often meant little more than undemarcated land lying between two or more properties, and is not the equivalent of the English "Common."[1]

Yet although land was rarely *held* in common in Northern Scotland, the custom of joint *leaseholds* was very prevalent. The very names of the division of land in Eastern, Southern and Central Scotland are based on the custom of joint cultivation. The Davoch of 416 acres was divided into four Ploughgates of 104 acres, which seems to have represented the area of the typical farm, and of the winter's ploughing of the common plough.[2] The Ploughgate was subdivided into four Husbandlands and eight Oxgates or Oxgangs, the former being a common unit for the smaller Highland farms, and the oxgangs representing the extent of the holdings of the individual joint tenants and being each supposed to supply an ox for the common plough.[3] The acreage quoted seems to have been almost purely nominal, and in practice land seems to have been measured more by the units it was supposed to maintain than by its acreage.[4]

There are farm leases of the late eighteenth century that show the arrangement of the eight joint tenants of the ploughgate still surviving, but an unvarying organisation was probably never general—even mediæval charters refer to farms considerably larger than one ploughgate or to four or five oxgates on a farm being held by one tenant.[5] On the other hand, in the Highlands, the oxgates were often divided in half, to support the dense population; thus half an oxgate was the usual holding of a joint tenant in the Mackintosh leases of the eighteenth century.[6] The position became further complicated by a class of cottars and "acremen," who were dependents of the joint tenants and received a proportion of corn and pasturage in

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to borough towns; for however poor the soil may be, it always can be claimed by an appropriated owner; and though in the case of moors and heaths the line of march between different proprietors may not be very distinct . . . yet it is in general in the power of the proprietors themselves to settle that line of march where they incline."

[1] C. Fraser Mackintosh, *Letters of Two Centuries*, pp. 139 and 202, illustrates the current type.

[2] Spalding, *Club Miscellany*, IV, 261.

[3] C. Cosmo Innes, *Legal Antiquities*, pp. 241, 254. See also Rhynne, First Statistical Account, XIX, 290.

[4] Moy, First Statistical Account, VIII, 507.

[5] W. F. Skene, *Celtic Scotland*, III, scattered through Chap. VII, p. 246; C. Cosmo Innes, *Legal Antiquities*, Chap. VI, p. 241.

[6] Leases preserved in the Mackintosh Muniments.

return for work in the common field.[1] The extents of the individual holdings were therefore by no means rigid, and in farms where one can trace out the tenant's holdings at different dates, one finds that a constant variation seemed to go on.[2] Such a plastic state of affairs must have simplified the gradual introduction of the new system of agriculture.

On a certain number of farms the old system of joint tenancies passed directly into the new one, probably, as a rule, after a good deal of gradual consolidation." [3] But more often there was an intermediate stage, for the tacksman system became very common in Scotland in the seventeenth century. It became usual for the proprietor to let a large piece of land, perhaps a davoch, to a man of some substance, often to a cadet of his own house, on a long lease,—" three nineteen years " was fairly usual, but quite often a longer term of years is mentioned. In a rent roll of the great Gordon estates in Aberdeenshire, dating from the early sixteenth century, both types of leaseholdings are to be found, but the tacksmen predominate.[4] Under the tacksman system there was a considerable amount of joint cultivation. The tacksman sublet some of his land and cultivated the rest with the help of the " labour dues " of his subtenants. Certainly in some instances the tacksman's and subtenant's land lay in intermingled strips in the common field.[5]

At the time of the First Statistical Account tacksmen still leased a considerable part of Aberdeenshire, and subtenants were usual not only on their farms but on those of lesser men. At Tarland and Migvie,[6] a remote parish in the hilly South-western corner, " there are about fifty or fifty-four farms, some of larger and some of lesser extent; some possessed by one and others by two tenants, each of whom have from two to three,

[1] W. Marshall, *Account of the Agriculture of Central Scotland*, p. 29.

[2] For the Farm of Dunachton (Inverness-shire) compare Rent-roll of the Lordshipe of Huntlye; *Spalding Club Miscellany*, IV (Kinicraig only), 297; C. Fraser Mackintosh, *Antiquarian Notes*, Series I, p. 78; I. F. Grant, *Everyday Life on an Old Highland Farm*, p. 102.

[3] Actual examples of the process are rare. Some old documents relating to the estate of Drumchardny (Inverness-shire), and printed in the Estate Magazine, Nov. 1924, show that the original organisation had become modified and that there were three " half davochs " and twenty-seven smaller holdings. There were twenty-one tenants, several having shares in more than one holding (in some cases four), and these different shares were dotted about the estate.

[4] Coul, First Statistical Account, III, 198, gives a good definition of the word. Gordon Rent-roll. *Spalding Club Miscellany*, IV, shows prevalence in Aberdeenshire.

[5] I. F. Grant, *Everyday Life on an Old Highland Farm*, pp. 102, 103.

[6] Tarland and Migvie, First Statistical Account, VI, 222.

and some four or five subtenants." And subtenants are mentioned as a matter of course all over the county as the main source of agricultural labour.[1] Thus at Monymusk, one of the most agriculturally advanced parishes in the county, there were said to be thirty-four farms and eighty-five subtenants. The minister of Udny[2] gives a good general picture of the close connection between farmer and subtenant. The latter was said to have "a bolls sowing or two" of land (*i.e.* about one or two acres, in several accounts he is said to have had a "rig"), which was "ploughed to him"; his beasts were pastured with the farmer's cattle and he had the right to cut a supply of peats and to have them carted. In return, "he works to the farmer in harvest and attends the plough during winter and spring." The proportion of rent and personal services by which he paid the farmer for his share of the farm varied considerably, even on the same farm or estate.[3]

The minister for St. Fergus gives a fairly typical account of a parish in which the new organisation was introduced systematically and rapidly, but in many parishes the change seems to have been more gradual. He writes: "In 1766 the whole parish was let for eleven years certain and the lifetime of the individual tacksmen. . . . Soon after the expiry of the certain period of tack covenanted upon, the life-renters began to drop off; and when the farms which they had occupied were large, they were subdivided and the rents raised and apportioned among the tenants previously resident upon the farms. Others were allowed to remain at the former rents, when the immediate heirs of the deceased tacksman succeeded; and where there were no heirs wishing to succeed, the farms were allowed to go to, and remain in grass, until almost the whole of the life-rents expired, in order to allow the proprietor the means of straightening the marches and making other necessary arrangements for improved methods of tillage."[4]

The Statistical Accounts for Aberdeenshire bring out very clearly the fact that it was the improved methods of cultivation, and especially the introduction of turnip-growing, that primarily brought about the demarcation of the individual holdings, which

[1] Monymusk, First Statistical Account, III, 66; Kennethmont, *ibid.*, XIII, 66; Keithhall, *ibid.*, II, 527.

[2] Udny, First Statistical Account, IV, 156.

[3] Cf. Rental of Drummond Estate, quoted by C. Cosmo Innes, *Scotch Legal Antiquities*, p. 226.

[4] St. Fergus, First Statistical Account, XV, 134. The rental was increased from £1418 19*s.* 5*d.* in 1766 to £3000 in 1803.

rendered the making of fenced fields possible.[1] The Scots open-field system varied somewhat from the English; the farms were divided into "infield" land, which was copiously manured and bore continuous crops of oats and bear or barley, and "outfield," which consisted of the poorer or less accessible land. Portions of this were brought under cultivation in turn, and then bore continuous crops until the soil was exhausted, when it was allowed to lie fallow for some years. The only manure it received was from the practice of folding the animals upon that part of the outfield which was next to be cultivated. As in England the rigs of the different cultivators were, to quote a picturesque account, "interwoven" in the common fields, and the cattle were pastured "promiscuously." In Scotland, with its less fertile soil and much worse climate, this elementary system probably gave much poorer results than in the South. At any rate, there is no lack of testimony as to the abject poverty of the people.[2] To quote actual figures, Sir John Sinclair made careful estimates which showed that the usual dietary of a farmer with about thirty acres of arable in a very fertile district only just enabled him to "subsist," but "hardly in a manner adequate to give spirit or strength for labour."[3] From calculations based on farm accounts for Upper Strathspey, I do not think that the cultivators of an oxgate of land in that district got this amount of food in three years out of ten.

In Scotland the reforms in agriculture worked their way northwards from the Lothians. The gentry took up the improved methods as a kind of hobby fairly quickly on their home farms. In Aberdeenshire, by 1792, when the First Statistical Account was compiled, in all instances the proprietors' own farms were being vigorously improved, and evidently had a ring fence round them, but in a good many of the more hilly districts there was no resident laird, and the local people had not the advantage of this type of "observation farm."

Among the farmer folk the reforms made much slower headway, yet, at the time of the First Account, in the more prosperous and get-at-able parishes of the North-east side of Aberdeenshire, the big farmers—virtually the tacksmen—were carrying on the new methods. In the most advanced parishes perhaps a dozen farmers are mentioned as beginning; in those not quite

[1] Anderson, Report to the Board of Agriculture on the County of Aberdeen, p. 54.

[2] Cf. Birt, *Letters from a Gentleman in the North of Scotland*, II, 85.

[3] *I.e.* six bolls of meal with milk and a little fish. Sir John Sinclair, *Survey of the Northern Counties*, p. 76.

so advanced, only two or three of the most considerable men. One gathers that in about one-third of the parishes of the county this rather tentative, piecemeal kind of improvement was being carried on. But, in addition, in as many as twelve or fourteen parishes situated either in the extreme North-east or close to Aberdeen the practice of the reformed methods had permeated more widely, and even the smaller men were beginning to lime and grow an acre or two of turnips.[1] Even in the ridgy uplands between the level coastwise ground and the higher hills some knowledge of the new agriculture was spreading, and the people were beginning to grow what several ministers rather happily describe as a "spot" of turnips. Only in the remote districts right up in the hills "all the old-fashioned prejudices of husbandry are still looked upon as sure and infallible rules of good management."[2]

The order in which the improvements were introduced varied. At Kildrummy[3] the first step was the liming of the infield. At Kennethmont the outfield was the first to be limed. In some parishes the straightening of the crooked ridges was a very early step. At Alford, which at the time was entirely unimproved, multures[4] and labour dues had almost lapsed, whilst they were still in force and very onerous in some of the most advanced northern parishes. The minister of Birse[5] describes the confusion that existed. Some of his parishioners were liming their ground, whilst others averred that there was already too much in the soil. "Some are cleaning their ground by a little green cropping, and by laying it down with artificial grasses, others are going on taking two or three successive crops of oats, and of bear . . . without allowing some portions of their ground any rest in a century. . . . Some are going on with spirit, enclosing and clearing their ground of stones. Others are throwing every impediment in the way of the improvers, by trampling down the fences, and by not only neglecting to remove stones from their fields, but even by alleging that the stones are beneficial to the soil, and tend to nourish the crop." In reading the First Statistical Accounts, however, one must allow for the fact that

[1] Cf. King Edward, which was specially advanced. First Statistical Account, X, 395.

[2] Alford, First Statistical Account, XV, 447.

[3] Kildrummy, First Statistical Account, XVIII, 411.

[4] Payments for grinding corn. The tenants were "astricted" to the landlord's mill, and considerable abuses were not unusual. The rates charged varied enormously in the different parishes.

[5] Birse, First Statistical Account, IX, 103.

the ministers naturally dwelt upon what was new and interesting. Nowhere was there a regular rotation of crops, and even in the most advanced parishes the old divisions of "infield" and "outfield" land still generally obtained, showing that the old arrangement of the land still survived to a large extent.

Although all these improvements were of importance, there was one definite sequence of cause and effect that did more than anything else to bring about the change from scattered, jointly cultivated holdings to consolidated individually leased farms, without which the enclosure of the land into separate fields was difficult to arrange, and does not seem to have been attempted in Northern Scotland. Adam Smith has traced the predominant effect of the expansion of the cattle trade with England after the Union upon Scots agriculture. He says: "The increase of stock and the improvement of land are two events which must go hand in hand" (*The Wealth of Nations*, Book I, Chapter II, part 3). Scotland is notably unsuitable for providing winter pasturage for stock, and one of the greatest agricultural problems of the old days was how to maintain the cattle during the winter. In spring and summer they were herded off the crops, but as soon as the harvest was got in "the countryside was regarded as one universal common" (Sinclair), and they wandered unchecked over all the countryside, devouring every blade of grass and even eating the roots as the plough turned them up in the spring.[1] Fattening the cattle was out of the question, it was a problem to keep them alive. In the Highlands upon an average one in five of the hardy "black cattle" were lost through starvation.[2] The minister of Lumphanan, in Aberdeenshire, wrote that the people were forced to sell their beasts in the autumn "to great disadvantage . . ., to put them to the glens or to starve them at home."[3]

As early as 1686 an Act of Parliament was passed ordering the farmers to herd their "nolt, sheep and other bestial," "as well in the winter tyme as the summer" and to keep them folded at night "soe as they may not eat or destroy their neighbours' ground, woods or planting."[4] The Act, however, was generally ignored until the introduction of turnips and sown

[1] A. Marshall, *General View of the Agriculture in the Central Highlands of Scotland*, pp. 38, 39; Birt, *Letters from a Gentleman in the North of Scotland*, II, 132, etc.

[2] Sir John Sinclair, *General Survey of the Agriculture in the Northern Counties*, p. 114.

[3] Lumphanan, First Statistical Account, VI, 382.

[4] *Acts of the Scots Parliament*, p. 595, 1686.

grasses forced the farmers to take action. Ramsay of Ochtertyre wrote that with the introduction of these improvements, the tenants "begin to have an idea of property in winter as in summer; nor is it any longer thought bad neighbourhood to drive off cattle that are trespassing upon their winter crops." [1] At the time of the First Statistical Accounts, in the backward, hilly, south-western corner of Aberdeenshire, in six parishes winter herding was "looked upon as an intollerable grievance and therefore not practised." [2] Thus at Auchindoir [3] "as soon as the corn is off the fields, the cattle are let loose without a keeper. The sown grass and turnips are the objects of their depredations, and these, as the country is open, it is impossible to preserve." In several parishes where turnips were being more generally grown and winter herding had had to be introduced, the labour of keeping the hungry beasts away from the roots was complained of.[4] Enclosures of some kind were, in fact, inevitable where improvements were introduced. Ramsay of Ochtertyre writes: "Nothing indeed but a stone fence will keep out cattle that have once tasted that delicious root. For it every other food is loathed; and the moment they are turned out they run straight to the turnip field, and if access to it cannot be had, stand at gaze for hours. Some of our tenants told me their cows were more the worse than the better of turnips, from being hard hunted and put off their usual food." [5]

At the time of the First Statistical Account seven Aberdeenshire proprietors had already attempted a systematic improvement of the patchwork, haphazard fields and intermingled holdings. Thus Mr. Cumin of Auchray [6] began to improve his estate about 1739. "He gradually subdivided the larger farms, and bound his tenants to drive annually from the quarries, seven Scotch miles distant, a prescribed quantity of limestone, which he taught them to break, burn and apply; he obliged them to sow a certain portion of their land with turnip, flax and grass seeds; . . . he frequently walked or rode through his estates, freely conversing with his tenants, rousing them to industry by motives suited to their respective tempers. . . ." Alexander

[1] John Ramsay of Ochtertyne, *Scotland and Scotsmen in the Eighteenth Century*, p. 277.
[2] Glenmuick, First Statistical Account, XII, 215.
[3] Auchindoir, First Statistical Account, XII, 490.
[4] Old Meldrum, First Statistical Account, XIII, 135.
[5] John Ramsay of Ochtertyre, *Scotland and Scotsmen in the Eighteenth Century*, p. 273.
[6] Monquhitter, First Statistical Account, VI, 121.

Fraser of Strichen[1] and Sir Archibald Grant of Monymusk (one of the best known of the local improvers,[2] followed much the same lines. Sir Archibald brought men from the South to teach his tenants, and showed the people the practical advantage of "draining, cleaning, straightening and green cropping their land." As mere example was not enough, he obliged them in their leases to enclose a certain amount of land annually and to grow a proportion of green crops. By 1792 Sir Archibald had been gathered to his fathers, but his people were described as "enthusiastically content" with the results of these enforced improvements. St. Fergus has already been alluded to.[3]

In two parishes more sweeping schemes of reorganisation were attempted. Longside was peopled by small tenants—three or four used to join together to work their common plough. The minister considered that "no simplification of the different branches of agriculture can be accomplished on a very small scale," and was in favour of amalgamating the farms and converting "many of the present possessors of them" into day labourers. "Both classes would be benefitted, and live infinitely better than these do at present. Proprietors ought at least to have this in view, if they wish to see their estates improved or the tenants on them comfortable." Fergusson of Pitfour, the principal proprietor, however, proposed to go further—"by granting no leases for many years past, he has at present much in his power, with regard to new-moddling his farms, and putting them upon a proper footing. With this view he has paid particular attention to the different modes of farming, both in England and the South of Scotland. But to introduce so complete a change . . . all at once (if at all practicable) is attended with great difficulties; and gradual reformation is perhaps here, as well as in most other departments of human labour, a preferable plan."

At Premnay,[4] a small and backward parish in the hilly part of the county, the late proprietor had begun to improve his lands "on a great scale." He fetched lime from Aberdeen at great expense. "The fields were enclosed and planted with hedgerows. . . . Proper farmhouses and other necessary buildings were erected, and the lands, after being several years in the proprietor's own hands, were let to different farmers." The

[1] Strichen, First Statistical Account, VII, 416.
[2] Anonymous, *Northern Rural Life*, p. 102.
[3] St. Fergus, First Statistical Account, XV, 135.
[4] Premnay, First Statistical Account, XVI, 637.

results were unsatisfactory. The proprietor himself lost heavily, and the Second Statistical Account describes how the hedges merely went to waste. The population fell from 448 in 1755 to 260 in 1788, "when the old farmers were removed." Fifteen years later it had recovered itself, but the tone of the neighbourhood had suffered, for a new population "cannot be supposed to be so much attached to the soil or to the proprietor, as where they have resided on the lands from their infancy."

In blaming proprietors for mistaken methods it is only fair to remember how experimental were agricultural improvements. At New Deer and several other parishes lime was at first put on the ground so cautiously that it produced no effect, and then so copiously, and, in consequence, the land was so overcropped that its fertility was still impaired nearly forty years afterwards.[1] Part of Crimond was laboriously enclosed with earthen dykes, as the early improvers advised, and they were found to be useless.[2] The straightening and levelling of the old "rigs," sometimes made for patchy crops—light and early where the subsoil had been displaced from the crown of the ridges and waterlogged, and late where it had accumulated in the old furroughs. So great was the general ignorance, that Sir Archibald Grant had to write a careful treatise explaining to the farmers that the laws of heredity applied to stock-raising.[3] Even the Second Statistical Accounts, written in 1846, are full of the difficulties of finding the most suitable rotation of crops and of the hardships that had resulted from an enforced adherence to the Berwickshire seven-shift course; and the question of the crossing of the Buchan and "Teeswater" (Shorthorn) breeds was a very moot point.

It is interesting to consider how far these early attempts at agricultural reform appreciably influenced the considerable movement in the population that was going on. In 1755 a Doctor Webster had made an estimate of the population of the county, parish by parish. According to these not very correct figures the total population was 116,836.[4] The First Statistical Account—1792—gives the total as 122,921, an increase of about 6,000.[5] Comparing the sets of figures for the different parishes, so far as they are given, one finds a nearly stationary population

[1] New Deer, First Statistical Account, XI, 185.

[2] Crimond, First Statistical Account, XI, 409.

[3] Sir Archibald Grant, *Essays on Agriculture*, p. 318.

[4] According to the different parish accounts he sometimes over- and sometimes under-estimated.

[5] Sir John Sinclair's *Abstract of the Statistical Accounts*, p. 150.

in thirty-two parishes,[1] a definite increase in seventeen, and a definite decrease in twenty-four. The towns of Huntly and Peterhead had an increase of over 5,000.

Many causes partly accounted for this shift of the population. The fisherfolk were tending to move from the fisher hamlets to the newer harbours. The working out of the peat mosses is given as one of the reasons for the decrease in seven parishes in different parts of the county and for the substantial increase in three others.[2] The failure of the harvest of 1782 proved the last straw to some of the struggling crofts in bleaker districts. The development of the towns, besides causing a direct increase of 5,000 in Peterhead and Huntly, also affected country districts. In twelve parishes the superior attractions of the towns are mentioned—especially both in the less prosperous hilly districts, and, more markedly, close to the towns themselves.[3] Peterhead, Huntly and Keith (just over the county boundary) were evidently draining the parishes near by; and round Aberdeen a double ring can be traced, Dyce, Newhills, and Old Machar itself were increasing as factories sprang up. Kintore and other parishes just beyond were feeling the drain, and in Skene and Peterculter the conflicting effects of amalgamated farms and rising industries are mentioned.

There were, however, two very definite groups of parishes, one showing a decrease and the other an increase of population. In the South-west there is an almost compact mass of twenty parishes all showing a decrease. It varies in different parishes from under 100 to more than 500—in Cushnie, and Aboyne and Glentanar it amounted to one-third of the total population—and it totalled for the twenty parishes 4,090. The boundaries of this group almost coincide with the main hill masses of the country—the Grampians and their foothills, which surround the headwaters of the Don and the Dee; and the projecting boss of hilly country that culminates in Benachie. The physical disadvantages of the group lay not merely in a soil that was often poorer than in low-lying districts, but in the climate, for it is the early and late frosts and uncertain harvest that take such heavy toll of Highland crops—and this must have been still more the case when the old, late-ripening varieties of oats were in use. There

[1] Including the rural portion of Peterhead.

[2] The decrease took place in Ellon, Udny, Keith Hall, Alford, Inch, Towy Bourtie.

[3] Near Huntly, Cairnie, Forgue, Drumblade, Auchterless; near Aberdeen, Belhelvie, New Machar, Kintore, Skene, Echt, Drumoak. In the hills, Keig, Alford, Clatt, Auchindoir, Tarland, etc.

are strong indications that depopulation in this group was mainly caused by the failure of the difficult land to supply its population with that rising standard of comfort that an increased contact with the outside world was accustoming them to. The decrease was definitely not due to changes in agriculture, for it is precisely these backward and inaccessible parishes of the South-west that were least affected at the time of the First Statistical Account.

In the North-east there is another group of nine adjoining parishes [1] that all show an increase in population (though three of them, Old Deer, Monquhitter and Fraserburgh, with their growing villages, account for nearly three-quarters of it). These parishes consist of fairly good soil. In the days of difficult land transport they had the great advantage of being accessible to coastwise trade, and they were very advanced agriculturally, which, no doubt, helped to maintain the denser population. But the reasons for the increase given in the different parish accounts were mainly (*a*) the growth of towns and villages, and (*b*) the splitting up of the farms, an increase of at least 2,000 people being attributed to this as the principal cause. There can be no doubt that the fundamental cause for these changes was the amazing growth of the linen trade in the district.[2]

From the foregoing summary it is at least clear that the beginning of the changes in agriculture were not responsible for the considerable movement of the population of the late eighteenth century. As a matter of fact, decrease in population due to the proprietors having taken farms into their own hands, and improved them for reletting at a higher figure, is noted in nine instances.[3] The total decrease—and in almost every instance other causes for it are mentioned—is about 1,000, and in the case of Premnay, already mentioned, and Culsalmond,[4] where a little time had elapsed since the reorganisation, the population had risen to its former figure. If one makes a rough classification of the parishes into three categories, according to the progress of agricultural improvements at the time of the

[1] King Edward, Monquhitter, Aberdour, Tyrie, New Deer, Old Deer, Strichen, Fraserburgh, Pitsligo.

[2] The linen exported from Aberdeenshire had increased from 41,040 yds. worth £1,539 in 1727 to 137,137 yds. worth £11,551 in 1788. It was largely located in the North-eastern towns and villages. In 1792 Huntly exported 73,150 yards; Rathan spun 38,900 lbs. of yarn, and in Strichen £4,000 worth of linen yarn was sold at the local markets. See A. Warden, *The Linen Trade*, pp. 476, 506, 531, 534.

[3] First Statistical Account, IX, 434. The other parishes were Strathdon, Towie, Auchindoir, Cluny, Clatt, Old Meldrum, Forgue, Auchterless.

[4] Culsalmond, First Statistical Account, III, 240.

First Statistical Account, it is at least clear that the improvements were the cause of no widespread depopulation. Of the most advanced parishes, nine had an increasing population, twelve a stationary one and five showed a decrease. Of parishes less advanced, four were increasing in population, eight were stationary and seven were decreasing. Of the definitely backward parishes, one showed an increase, four were stationary and eleven were decreasing.

Because of the effect of the agricultural changes upon them later on, it may be worth while summarising the position of rural handicrafts at the time of the First Statistical Account. In the most backward hill parishes the people made their own shoes and ploughs, built their own houses, etc.,[1] but in most parts of Aberdeenshire local needs were supplied by local craftsmen, who were "all in some degree farmers,"[2] as a means of subsidiary livelihood. The crofter weavers of the North-east were a further development of the same type of worker. Near Aberdeen and the other towns the newer type of industrial organisation was developing and factories were being set up.[3]

There were also two great rural women's industries for the production of exported goods—stocking-knitting, which it is estimated brought £200,000 into Aberdeenshire at this time,[4] and the rather less valuable flax-spinning for the local linen and thread industries. The immense importance of these subsidiary trades shows how inadequate was the agriculture of the time to maintain the population. In a flourishing parish like Monquhitter, in the North-east, the wife of a subtenant or crofter "commonly pays landlord and merchant by the produce of her cows and by manufacture; and leaves it to the husband, by the sale of cattle and by his work, to furnish bread." In inland districts the women's work was even more universally important. In some parishes the rent day was specially fixed to fall immediately after the Aberdeen stocking merchants had made their periodic rounds.[5] At Leochel and Cushnie:[6] "were it not

[1] See Towie, First Statistical Account, IV, 547; Strathdon, *ibid.*, XIII, 171; Glenbuchat, *ibid.*, XIX, 7.

[2] See Longside, First Statistical Account, XV, 282, and St. Fergus, *ibid.*, XV, 134.

[3] Longside, First Statistical Account, XV, 282, gives a very interesting account of the transitional period.

[4] W. R. Scott, Report to the Board of Agriculture for Scotland on Home Industries in the Highlands and Islands, p. 19.

[5] Among the parishes where the importance of women's work was specially emphasised were—Clatt, Rayne, Glenmuick, Crathie and Braemar, Tarland and Migvie, Leochel and Cushnie.

[6] Leochel and Cushnie, First Statistical Account, IV, 173.

that the women make something by knitting stockings, and that the female children are employed in that way as soon as capable, it would be absolutely impossible for them, without assistance, to make a shift to live." It is significant that the six other parishes where the importance of the work is most stressed all lie in the hilly, South-western part. The work was, however, of importance all over the county. It is not exceptional to find five or six hundred pounds being earned annually by the knitters of a parish. As was natural in the eighteenth century, the ministers accepted the prevalence of child labour at this work as a matter of course, but several accounts say that the continuous spinning or knitting made the women "valetudinary," hysterical or weakly; and Sinclair, in his more general account, endorses this.[1]

From the different accounts one gets a general idea of how the various classes were situated at the time when the agricultural reforms were beginning. Subtenants seem to have been feeling the pinch of the changes When rents were raised farmers tended to pass on the difference, and even in districts where their own labour dues had been abolished they were said still rigidly to exact those of their subtenants.[2] Subleases were not given, and complaints were made that where the subtenant had made improvements he was liable to be displaced without compensation.[3] Their rents were generally five shillings an acre higher than those of the farmers, but this included ploughing. They were decreasing in numbers in the North. One minister advises that subtenancies should be discouraged and the cottagers put "in the envied state of small but independent tenants"; but several ministers were strongly against such crofts, and the descriptions of the circumstances of such people are not very favourable.[4] At Rayne,[5] which is largely on poor soil, for which something must be discounted, there were an unusual amount of very small holdings, and the cultivators were said to be suffering from a plague of weeds: "Indeed there are too many small crofts; and the occupiers of them are so poor that their cattle have not strength to plow and dress them properly." This parish was specially dependent on women's knitting, and fevers were said to be prevalent there on account of the people's low diet.

[1] Sir John Sinclair, *Abstract of the Statistical Accounts*, p. 147.
[2] Kennethmont, First Statistical Account, XIII, 66. [3] *Ibid.*
[4] W. Marshall, *General View of the Central Highlands*, pp. 30, 31; Sir John Sinclair, *Abstract of the Statistical Accounts*, p. 249.
[5] Rayne, First Statistical Account, XV, 106.

Farm servants were distinctly better off. Their wages had risen from £1 13*s.* 4*d.* per annum forty years previously, to £6 or £8 with the same perquisites. Under the old, laborious system large numbers were needed—a man, woman and lad were employed on even a small farm [1]—and the rise in the wage bill was a heavy burden. It is surely not merely chance that of the five parishes that complain most bitterly, four were situated in the hilly South-western corner.[2] The minister of Birse [3] writes that the "great disadvantage" that afflicts his parish is "the difficulty of procuring, pleasing and paying farm servants." Many of the farmers, he says, are "threatened with ruin from this cause," and "words fail to describe the indolence and behaviour of the servants in general" (he does go on to describe them).

The Accounts record a tremendous rise in the standard of living, especially in the North-eastern parishes.[4] To quote St. Fergus as but an example: "The manner of living . . . is greatly changed within the last twenty years. The farmers now appear at church and market dressed in English superfine cloth, and many of their wives and daughters in cloaks and bonnets. The manservant is as expensively arrayed as his master, and the dress of the maidservant is little inferior to that of her mistress. The food of the inhabitants chiefly consisted of oatmeal, and sometimes of fish, but these generally salted and dried; owing to this cause the scurvy was a common disease. They used few vegetables, and turnips were often brought by sea from Aberdeen. Every cottager now has his turnips, cabbages and potatoes, and many of the farmers have their mutton, fed by themselves for summer food, and the greatest part of them kill a fed ox or cow for winter provision." Tea was said to be drunk twice a day in the farmers' families as a new luxury, and, owing to their having changes of linen clothing, the itch, formerly very prevalent, had disappeared among the country people. They were also becoming more "delicate in their behaviour." Yet the rise in the standard of living was evidently tending to outstrip the productiveness of the holdings. In one parish in the prosperous North-east [5] their expensive mode of

[1] Ellon, First Statistical Account. Sir John Sinclair, *Survey of the Northern Counties*, p. 76, gives details showing the employment of the same number of servants on a farm with, apparently, only about thirty acres arable.

[2] Especially Midmar and Birse.

[3] Birse, First Statistical Account, IX, 103.

[4] Cf. Monquhitter, First Statistical Account, VI, 121; Tyrie, *ibid.*, p. 138; King Edward, *ibid.*, X, 395; St. Fergus, *ibid.*, XV, 134.

[5] *I.e.* Rathan, First Statistical Account, VI, 15.

living was said to have "hurt the people very much indeed," and poorer districts evidently felt the rise more severely. At Lumphanan,[1] in consequence, the farmers were said to be putting by less than the servants, and they were said to be hard pressed in four other parishes; at Tough the farms were even being broken up.[2] The servants, though they were better paid, were said to save less than formerly, and to spend it all on the new fashionable clothes.[3]

The Second Statistical Accounts were compiled in 1846, just over fifty years later, and the minister of Logie Buchan most fitly summarises the great changes that the new system of agriculture had helped to bring about.[4] He writes:—

"Being one of the few whom it has pleased God to spare to assist in drawing up a second statistical account of Scotland, I may be allowed more than others to express my satisfaction at the vast improvements in agriculture which have taken place in Buchan since . . . the last account. . . . When I look around me, I seem to live not only among a new race of men but in a new world. Cultivation, like the gradual spreading of a garment, has changed the external face of the earth, and every locality wears a new appearance. The irregular patches and various denominations of arable land which were then interspersed amid the uncultivated wastes, are now absorbed in regular enclosures or extensive fields, the dark expanse of moss is greatly diminished, and the sombre herds of our native brown and black cattle are enlivened by a mixture of the white and speckled Teeswater. The low-thatched farmhouses and long, continuous rows of barns and byres are now converted into slated dwellings of two stories, and adjoining courts of offices; and, where necessary, the steep and rugged tracks that led to them into smooth roads of easy ascent."

He goes on to describe the turnpike roads, and says that he thinks that "the commission of at least heinous crimes is less frequent, and the propensity to low vices less general . . ." and that "a higher tone of morals now prevails." He gives a good general account of the improvements themselves.

Even in the most advanced parishes much had remained to be done. For instance, at Peterhead,[5] where already there seems to

[1] Lumphanan, First Statistical Account, VI, 382.
[2] Tough, First Statistical Account, VIII, 261.
[3] Cf. Cluny, First Statistical Account, X, 235.
[4] Logie Buchan, Second Statistical Account, XII, 799.
[5] Peterhead, First Statistical Account, XVI, 541; Second Statistical Account, XII, 344.

have been more enclosure than almost anywhere else in 1792, "turnips and grass were only partly cultivated. Turnips and grass now form an essential part of the rotations of cropping followed here, and are very extensively cultivated. The arable land was interspersed with bawks or patches between the ridges of waste and uncultivated land. The baulks have now been cultivated, and the land drained and partly enclosed and laid off in regular fields to answer the rotations agreed upon."

One minister describes the change from the old patchwork cultivation to modern enclosures as "fielding." The process had taken place over the whole county with the exception of Glenmuick and, perhaps, Glen-Buchat, both in the South-west. The farms had evidently been consolidated as separate units, though the individual fields had not always been fenced (some of the ministers refer to this latter process as enclosure.)[1] Regular rotations of crops, the field culture of turnips, improved ploughs, the selective breeding of stock, were all but universal among all classes of cultivator. It would be wearisome to repeat the accounts of the changes in parish after parish. At least four claim to have changed more than any other!

The fattening of cattle for the market had already been introduced in two parishes in 1792, and of course depended on the culture of turnips. It had also received stimulus from the introduction of steamer communication with the South. By 1846 it had become the principal source of revenue in many parishes of the North-east,[2] and the rotation of cropping was specially adjusted to produce an adequate turnip supply.

Two newer improvements—bonedust manure and tile drainage—were equally dependent upon the delimitation of holdings. By the former "thousands of acres of poor land . . . which formerly would not pay for ploughing were at once brought into profitable tillage."[3] This improvement made an especial difference to such districts as Central Buchan. The parish of Ellon, for instance, now so beautifully cultivated, was poverty-stricken at the time of the First Statistical Account. By the time of the Second Account it was flourishing, and the amount of bonedust used there "was so great as almost to exceed belief."[4] Tile

[1] To illustrate this meaning it is necessary to consider individual instances. A privately printed account of the estate of Muchalls (Aberdeen Education Trust) gives a good example.

[2] Especially Ellon, Second Statistical Account, XII, 899; Logie Buchan, *ibid.*, p. 799; Foueran, *ibid.*, p. 697; Old Deer, *ibid.*, p. 138; Tyrie, *ibid.*, p. 717; Monquhitter, *ibid.*, p. 762; Fraserburgh, *ibid.*, p. 249.

[3] Report on the Agriculture of Scotland, prepared by the Highland and Agricultural Society of Scotland, p. 26.

[4] Ellon, Second Statistical Account, XII, 899.

draining and subsoil ploughing "changed the very appearance and character of whole districts of Scotland." [1] The former made the valley bottoms, often the best land, available for cultivation, and, as the minister of Monquhitter pointed out, the greater dryness of the land made the crops ripen more quickly and be less liable to damage from frosts.

If one were to draw a slanting line across the county (with certain minor adjustments [2]), dividing the South-west from the North-east, one would almost completely divide the less productive, less advanced and less accessible districts from those in more fortunate circumstances. To the North the fattening of cattle, the use of bonedust, deep drainage and a considerable amount of fencing were usual features; they were exceptional ones to the south of it. Signs of the older system are several times mentioned on the border-line—the infield and outfield could still be traced at Oyne,[3] though they had long been cultivated alike. Auchterless had a few old tacks still surviving.[4] At Drumblade large numbers of children were still employed in herding,[5] and so on.

Unfortunately no complete returns exist that give the total figures of the results of the new system in increased acreage and productiveness. The information even about the individual parishes is most aggravatingly perverse in refusing to lend itself to exact comparison.

The gains may be estimated in various ways: increased area, larger returns both for cereals and stock, a better quality of both, and a better-balanced system of production. The cultivation of new land is mentioned in forty-nine parishes—nearly five-eighths of the county. For nine of them figures are given, showing a total of 3,712 acres, and therefore averaging about 412½ acres per parish. In others there are vivid descriptions: "At the time of the former Statistical Account . . . a great proportion of the parish was covered with broom, whins and bulrushes. These are now extirpated, and the eye meets with nothing but cultivated and mostly enclosed fields." [6] Besides taking in new land, the area of cultivation was increased by the draining of swampy patches, the abolition of balks and

[1] Report on the Agriculture of Scotland, prepared by the Highland and Agricultural Society of Scotland, p. 27.

[2] With the exception of the fertile vale of Alford and of the district round Huntly.

[3] Oyne, Second Statistical Account, XII, 624.

[4] Auchterless, Second Statistical Account, XII, 285.

[5] Drumblade, Second Statistical Account, XII, 297.

[6] Cf. Udny, Second Statistical Account, XII, 131.

the squaring of the fields. At Kincardine O'Niel, where five hundred acres were newly cultivated, the total increase in the arable was 1,350 acres.[1] In sixteen parishes some sort of a rough comparison between the eighteenth and mid-nineteenth centuries can be worked out, and the increase amounts to 32,229 acres, an average of 2,014 acres per parish—in Tarves the amount of arable is said to have been doubled. And it must be remembered that under the old system much of the land was outfield and only partly cultivated—the ratio varied considerably, but in Aberdeenshire, in 1792, one-third infield to two-thirds outfield was very usual, although in some parishes the outfield was not included in the estimate of arable land in the First Account. Only one parish records a diminution of cultivation, Aberdour,[2] where the land brought in during the Napoleonic Wars was being abandoned.

The quality and productiveness of the grain had also gone up. Bear and small oats were no longer sown, white oats and barley had been improved. At Kennethmont the usual return was one and a third more for oats and six times more for barley; at Leslie the improvement was rather less; at Rhynie the total grain crop was said to have been doubled, and at both Old Deer and Glen Muick actual figures are given which show that the total crop had doubled in the former and quadrupled in the latter.[3] At Tarves the produce is said to have increased tenfold.[4]

Rather an interesting table of production can be worked out for Kincardine O'Niel (it is to be assumed that the figures represented the ministers' ideas of average production at the two dates).

In 1792 Account.		In 1846 Account.	
4,600 acres of *oats* produced 13,280 bolls, sold at 10*s.* per boll, and made . .	£6,900	2,000 acres of *oats* produced 14,000 bolls, sold at 10*s.* per boll, and made . .	£7,000 0
800 acres of *bear* produced 3,200 bolls, sold at 12*s.* per boll, and made . .	1,920	500 acres of *barley* produced 3,250 bolls, sold at about 12*s.* 6*d.* per boll, and produced	2,021 5
110 acres planted with potatoes and turnips made .	600	700 acres planted with potatoes and turnips made .	2,800 0
500 acres down with grass, valued at . . .	187	2,300 acres under hay and arable pasture, valued at .	3,230 0
Total . . .	£9,607	Total . . .	£15,080 5

[1] Kincardine O'Niel, Second Statistical Account, XII, 831.

[2] Aberdour, Second Statistical Account, XII, 258.

[3] Kennethmont, First Statistical Account, XIII, 66, local information. Leslie, First Statistical Account, VII, 511, Second Statistical Account, XII, 1019. Rhynie, First Statistical Account, XIX, 289, Second Statistical Account, XII, 1015. Old Deer, First Statistical Account, XVI, 469, Second Statistical Account, XII, 138. Glenmuick, First Statistical Account, XII, 215, Second Statistical Account, XII, 772.

[4] Tarves, Second Statistical Account, XII, 667.

Agricultural reforms were not the sole causes of these changes. "The improvements introduced by the landowners towards the conclusion of the last century were at first but slowly adopted by the tenantry. Depressed by bad seasons and deficient in capital, they had neither the courage nor the means to attempt expensive innovations. The rise, however, in the price of agricultural produce which succeeded the breaking out of the war between this country and revolutionary France, by increasing the capital of the farmers, enabled them to take advantage of the more decided and valuable improvements." [1] The effect of steamer communication on the cattle trade has been noted.

But though agricultural prosperity owed much to outside sources, it had sufficient vitality to weather reactions such as the severe agricultural depression that lasted in Scotland nearly nine years after the Napoleonic Wars.[2] "Notwithstanding the clamours of agricultural distress, improvements were never carried on here with greater spirit than at present. . . . Farmhouses and offices have been greatly improved in appearance within the last forty years, and the occupants are much better clothed, fed and lodged." [3] In only two parishes were there signs of decline—Aberdour, already mentioned, and Lonmay, where "the tide of prosperity is at present ebbing," and there were "low prices for produce—but high rents, high charges for labour and implements. . . . Great industry and the greatest possible frugality are requisite to obtain the means of bare subsistence." [4] These two parishes were probably affected by the decline of the local linen trade. A more serious outside factor was felt to be the threatened abolition of the Corn Laws. Thus at Bourtie [5] "two-thirds more of the uncultivated land of the parish would be brought under the plough if the farmers and proprietors believed that the Corn Laws would continue."

Between the two statistical accounts the rôle that agriculture played in the occupational organisation of Aberdeenshire had been profoundly altered. The eighteenth century had seen the rise of rural industries, notably stockings and linen, carried on as joint or subsidiary industries in connection with farming. The early nineteenth century saw the development of specialised urban, factory industries, and agriculture became more completely the sole support of the rural population.

[1] Tarves, Second Statistical Account, XII, 667.

[2] Report on Agriculture of Scotland drawn up by the Highland and Agricultural Society of Scotland, p. 26.

[3] Cf. Fintray, Second Statistical Account, XII, 166; Glenmuick, *ibid.*, p. 772.

[4] Lonmay, Second Statistical Account, XII, 57.

[5] Bourtie, Second Statistical Account, XII, 620.

The flax-spinning industry died away early in the century—Huntly, in the previous account called the Paisley of the North, now found its main livelihood from trading with the neighbourhood, Pitsligo was a stagnant place inhabited principally by agricultural labourers,[1] Old Meldrum and Old Deer, according to the First Account expanding linen-weaving centres, had almost given up the industry, and in the rural districts of Turriff, St. Fergus, Crimond—which had owed its main prosperity to the sale of linen yarn [2]—Longside (woollen industry), etc., the click of the loom and the whirr of the wheel had been almost entirely silenced. The stocking trade had dwindled to insignificant proportions, and the movement of the fisherfolk to the harbours had continued.

The fundamental causes for the change were, of course, the great economic developments of the times—*that* is mentioned in several reports, but the reform of local agriculture was also a considerable factor. Adam Smith points out that the Scots subtenant's and cotter's industries were subsidiary trades: "The produce of such labour comes frequently cheaper to market than would otherwise be suitable to its nature. Stockings in many parts of Scotland are knit much cheaper than they can anywhere be wrought upon the loom." [3] In Aberdeenshire spinning mills were not set up till 1810,[4] but more than ten years earlier, owing to the failure of local supplies, the manufacturers were obliged to get all their yarn from Ross and Caithness—no light task when there was barely a "made" road North of Inverness.[5] In the more backward districts of the Northern and Central Highlands, and in a few parishes in Aberdeenshire, where the introduction of agricultural reforms happened to come later than the general use of spinning machinery, and supplies of this cheap labour were therefore still available, it was diverted from one trade to another,[6] but on the whole, the great Scotswomen's rural industries, which had been the mainstay of the poorer

[1] Report on Highland Home Industries, published by the Scottish Home Industries Association, Chapter on Pitsligo Lace.

[2] Crimond, First Statistical Account, XI, 409.

[3] Adam Smith, *The Wealth of Nations*, Bk. I, Chap. X, Pt. I.

[4] A. Warden, *The Linen Trade*, p. 450.

[5] Essay by Mr. Mill, Penthill Factory, Aberdeen, printed in the first bound edition of the *Transactions* of the Highland Society, and giving his personal experiences.

[6] W. R. Scott, Report to the Board of Agriculture for Scotland on Home Industries in the Highlands and Islands, pp. 23, 32; D. Bremner, *Industries of Scotland*, p. 306. An article written by myself on "Highland Rural Industries," *Edinburgh Review*, Jan. 1925, gives a fuller account.

people,[1] died away completely within thirty years, and their decline only caused distress in comparatively few isolated cases.[2] Agriculture was becoming an adequate source of livelihood for its workers.

The partial survival of the Aberdeenshire stocking industry helps to prove the case. By 1846 it was only carried on in eleven parishes, and there only by the elderly, lone women. Two of these parishes contained large villages that had suffered from the decline of linen weaving; eight were in poor, hilly country; and in three of these latter and in one other parish there was an unusual number of small crofts. Methlic [3] is a good example. The average rent per acre there was about the lowest in the county,[4] and crofts were numerous. In 1792 people "of every age and sex were employed [stocking knitting]. Where other work does not interfere, this enables them to live tolerably well." By 1846 the old women still knitted, but their rates were only about a quarter of those of the eighteenth century. It was the survival of an economic need as much as of an industry. The sale of poultry, eggs, cheese or butter—apart from regular dairy-farming—and of honey is mentioned as being of importance in three of the parishes where stockings were made, and in others of like circumstances where "there is little else of produce to spare for the market." But in one advanced parish [5] we learn that the farmers could now afford to keep their poultry, and that only the crofters sold them.

Between 1792 and 1841 the population of Aberdeenshire increased from 122,921 to 192,283. The rate of increase was 10 per cent., 15 per cent., 14 per cent. and 8 per cent. at the four decades. The agricultural improvements were being most widely introduced during the first and second decades, and they therefore did not hamper the general increase, but a large decline in the population directly supported by agriculture was going on. In 1801 38,610 persons were employed in agriculture and 13,123 in trades, manufactures and handicrafts; by 1841 the agricultural workers had dropped to 25,224 and those employed in "manufactures, commerce and trade" had risen to 27,923.

[1] In some districts more completely than in Aberdeenshire. See above article, p. 173, Sir John Sinclair, *Abstract of the Statistical Accounts*, and many of the First Statistical Accounts for Perthshire.

[2] Forming a striking contrast to the distress that followed the introduction of the power loom and the decline of the more urban industry of hand-loom weaving.

[3] Methlic, First Statistical Account, IV, 320; Second Statistical Account, XII, 962.

[4] *I.e.* 12*s.* 6*d.* per acre.

[5] Udny, Second Statistical Account, XII, 131.

As in the earlier account the parishes group themselves, and may be tabulated as follows :—

	In the South-western part of the County.	In the North-eastern part of the County.
Parishes with a decreasing population [1]	8	—
Parishes with a nearly stationary population.	12	6
Parishes with an increase of under 300	12	9
Parishes with an increase of between 300 and 400	6	5
Parishes with an increase of between 400 and 1,000	1	7
Parishes with an increase of over 1,000	—	8

These figures tend to show that productiveness of the soil had a good deal to do with the movement of the population,[2] but other forces were at work. In five parishes the increase in the population was attributed to factories, quarries, etc., and the towns of Peterhead, Inverurie and Fraserburgh accounted for an increase of 3,916; the parish of Newhills, which was affected by the development of the city of Aberdeen, had an increase of over 1,000.

The development of the villages was largely dependent on agriculture. Those of the North-west, which grew very rapidly until about 1810, owing to the expansion of the linen trade, were able to maintain their population when this industry died away. Under the new economic system they seem to have maintained themselves as distributive centres for the country round. It is more significant that five non-industrial villages were showing healthy development in the poorer parts of the country, for I think it shows not merely that goods were being factory made instead of by the agricultural workers themselves, but that the country people had an increased purchasing power to be able to buy them.

The direct effects of the agricultural improvements seem to have affected the population in different ways. Although the census shows that no large permanent decreases took place, the populations seem nearly always to have declined at the time

[1] In the case of Crathie (Second Statistical Account, p. 646) the decrease was over 950. In a few adjoining parishes, though the decrease noted in 1792 was partly made up, there was an absolute decrease from the population of 1755.

[2] The connection between productiveness of the soil and density of population is stressed in Sir John Sinclair's *Abstract of the Statistical Accounts* (1825), p. 154 and the Report on the Physical Welfare of Mothers and Children (published by the Carnegie United Kingdom Trust), III, by N. Leslie Mackenzie (1917), see p. 2, and the maps at the beginning.

when the rearrangement of land actually took place. Thus at Daviot,[1] where the rearrangement was recent, the minister notes "a diminished population, produced chiefly by the gradually improved arrangement affected by the proprietors in the division of their lands." After a little time, however, there was generally a rapid rise to more than the former population. In all the parishes where the dates of the agricultural changes, and figures showing the population at ten-yearly periods are given—Logie Buchan, Tarves, Oyne, Echt, Lumphanan and Alford [2]—this drop and rise can be traced, and there are indications of the same thing in four or five more parishes.

The reclamation of waste land caused an increase of population, especially in those parishes where it was carried out by the settlement of crofts on the new land.[3] But, as a set-off against the increased area under cultivation, the new agriculture enabled the work to be done with at least half as much labour per acre (though it was probably more continuously employed), owing to better implements, such as threshing-mills instead of flails, horse ploughs instead of those drawn by oxen, scythes instead of sickles, etc. On the other hand, in some districts, the fattening of cattle led to an increase of labour.

In the North-east of Scotland the yeoman class, which suffered so severely under the English enclosure movement, never existed. The number of landowners' names is given for nearly every parish in both accounts. The same names appear over and over again, but the average per parish was between four and five in the 1792 account, and rather over five in 1846. The increase largely took place near the towns. In the country districts one knows that the boundaries of the big estates were mostly unchanged. The increase in rental averaged two and four-fifths, and was fairly uniform over the county.[4]

Unfortunately it is not possible to estimate the increase of agricultural workers without holdings, for the earlier census returns do not make this classification. As subtenants gave

[1] Daviot, Second Statistical Account, XII, 821.

[2] Logie Buchan, First Statistical Account, IV, 421, Second Statistical Account, XII, 799. Tarves, First Statistical Account, V, 309, Second Statistical Account, XII, 667. Oyne, First Statistical Account, XV, 105, Second Statistical Account, XII, 634. Echt, First Statistical Account, XIII, 615, Second Statistical Account, XII, 735. Lumphanan, First Statistical Account, VI, 385, Second Statistical Account, XII, 1079. Alford, First Statistical Account, XV, 447, Second Statistical Account, XII, 485.

[3] Tyrie, Second Statistical Account, XII, 717.

[4] The figures for rents can be compared in twenty-three parishes. In Forgue it is shown that the total increase was threefold, but owing to increased cultivation the increase per acre was only twofold.

place to farm servants and day labourers, the increase in this class must have been considerable. There is also no data by which the average size of the holdings at the two periods can be compared.

Of course it is impossible to make even the most superficial comparison of conditions without some little consideration of the movement of prices. At the time of the First Account: "In general the necessaries of life are one-third to one-half dearer, and articles of luxury more than double within these forty years." [1] In the same period wages had advanced from £1 6*s*. 8*d*. and £1 13*s*. 4*d*. to £6 and £8 per annum. Between the First and Second accounts there had been the upward leap of prices due to the Napoleonic Wars, but they had fallen again. Oats and eggs were much as in 1792. Barley fetched more than the old bear; butcher meat had almost doubled. Wages, with food allowance, varied from £14 for the best ploughmen to £8 for an unskilled worker. Rent had almost trebled. On the other hand, less labour was required and it was more productive. Cattle-rearing illustrates the difficulty of striking a balance. In 1792 beasts were worth £3 10*s*. and sold at four or five years old, but their keep cost but little. In 1841 a fattened bullock was worth £20 to £30 at the end of his third winter, but breeding, feeding and housing him involved a considerable cost that is difficult to estimate. One is thrown back on the general statements of the accounts.

The descriptions of the improved standard of living in 1846 are all but universal, and they are emphatic and categorical, though the condition of farm servants, especially in the North-east, was not so satisfactory as that of farmers. Improvements in the people's food, clothing, manner of life—especially their cleanliness—are dwelt on. In nineteen parishes the improvement in housing is emphasised. In 1792 farmhouses were valued at 16*s*. to £1 5*s*., and subtenants' houses at 5*s*. to 10*s*. The houses were built of five wooden "couples" stuck in the ground, with a roof tree laid along the top, walls of dry masonry four feet high and a roof of sods were added. The floor was of beaten earth. In 1792 masonry houses were being introduced for farmers as an innovation. By 1841 farmers generally had two-storied houses, and masonry cottages with chimneys were common among crofters. At Keithhall, a parish where the rental of the holdings averaged £14 per annum, the value of the

[1] Cluny, First Statistical Account, X, 235, and Methlie, *ibid.*, IV, 320 give good general accounts.

houses and enclosures rose from £150 to £3,000. Only three accounts criticise the housing—one of them Fraserburgh, with a rapidly growing fisher-town.[1]

Although more general causes were also at work, the connection between the improvement in agriculture and the rise in the standard of living is noted in the accounts for sixteen parishes. At Pitsligo the increase in the rents and the people's comfort were "in a proportionate degree"; at Longside there was "an incredible advance in both," and so on all over the county. The abolition of service dues and of multures had, of course, long been universal.

The figures for pauperism are of interest, especially in view of the connection often traced in England between enclosure and the growth of pauperism. In 1846 the old Scots system of voluntary relief, administered by the kirk session, was still universal in Aberdeenshire,[2] although at Huntly it had had to be supplemented by a voluntary levy among the heritors, and there were signs, especially near Aberdeen, that it was breaking down. A comparison between the two accounts can be made in forty-three parishes, representatively scattered over the county. In these parishes persons in receipt of poor relief averaged 25·63 in 1792 and 33·93 in 1846, an increase of 9·3; but in that time the population had increased by about one-third, so the ratio per head would be lower. The rate of relief had risen from 12*s.* 9*d.* per pauper per annum to £1 18*s.* The parishes show great individual variation. In some the number of paupers is stationary, a few show a decline, others a correspondingly great increase. Perhaps on the whole the tendency to increase is greatest in some of the northern villages. Almost invariably the reason for the increase that the ministers give is that the people are less unwilling to accept charity, but the old women of two parishes were said to be affected by the decline in the stocking knitting.

With material gains there were less tangible losses. The old system of joint cultivation developed a wonderful sociability: "All the intercourse of life was carried on by a kind of tacit agreement, in an interchange of good offices, that would appear extravagant and romantic anywhere else. . . . The ground being all unenclosed, it depended entirely on the good faith and good herding of his neighbour whether a man ever put a sheaf in his

[1] Keithhall, Second Statistical Account, XII, 743.

[2] See A. A. Cormack, *Poor Relief in Scotland*, p. 59, for the account of an individual parish.

barn. The sheep and cattle, too, wandering promiscuously on the hills, the integrity of a man's neighbours was all he had to depend on for their return." [1] An Inverness-shire account said that the people were becoming too busy and prosperous to wish to play, and in Aberdeenshire they are described as taking to reading books and newspapers, the latter "greedily," and in all but the remotest parts losing their old sports and games and legends and songs and stories.[2] The ministers do not demean themselves by repeating the lore of fairies, brownies and ghosties that the people had inherited both from their Celtic and Anglic ancestry, but they do preserve some of the stirring local traditions of Aberdeenshire—of feuds by the great families and skirmishes with Highland raiders; of Macbeth's last stand at Lumphanan; and the Bruce's bitter "herschip of Buchan"; how Donald of the Isles swept southwards with ten thousand Highlanders, and was held at the bloody battle of Harlaw that set half Scotland mourning; of Mary Stuart's spirited little campaign by the Hill of Fare; and how Montrose four times passed through the county on his lightning marches and fought two pitched battles within it; of the Jacobite risings of the '15, which specially concerned Aberdeenshire, and the '45, both handled most gingerly in the First Account.

Only those who have tried to collect the old local traditions know how utterly their glamour has passed from the lives of the Scots country folk.

I. F. GRANT

[1] Mrs. Grant of Laggan, *Superstitions of the Highlanders*, I, 73.

[2] St. Fergus, Second Statistical Account, XII, 185, gives an amusing example of the gain and loss due to new ways. The people were said to be able to drink tea twice a day, but the ancient game of "gowff" on the links had almost died out!

THE POTTERIES IN THE INDUSTRIAL REVOLUTION

Extraordinary advances in technology and in the scale and methods of industrial enterprise mark the economic history of England in the eighteenth century. The mechanical inventions in the textile trades and the consequent rise of the factory system constitute a familiar story. But a complete understanding of this period of industrial revolution waits upon the production of detailed studies of particular industries. Hence our gratitude to Mr. Ashton for his excellent study of the Iron and Steel Industry. The development of the Pottery Industry during this same period has generally been neglected by the economic historian, though its development is sufficiently different to warrant attention, and though the Wedgwood MSS. at Etruria contain very interesting records of an eighteenth-century business enterprise.[1] The revolution in the potteries consisted in the discovery by constant experiment of new bodies, new glazes, new methods of decoration; a greater division of labour, a growth of the factory and the development of methods of control, *i.e.* the beginnings of scientific management and cost accounting; the improvement of transportation and the opening of new markets at home and abroad. In the technological revolution in the potteries there are important peculiarities; but the manufacturer who emerges is of the same genus as the Cotton Lord of Manchester, or the Iron-master of Birmingham, as witness their association in the General Chamber of Commerce (1784–6).

Some of the causes of this revolution may be examined. The main economic force was the growth of the market. With the improvement of transportation, the increasing command of foreign and colonial markets won by the merchant class, and the growing wealth and luxury of the metropolis, the demand for

[1] Not that the history of the potteries remains unwritten. The works of W. Burton, A. H. Church, Ll. Jewitt, E. Meteyard, J. C. Wedgwood, and many others provide a mass of material. It is the object of this article to interpret the history of the potteries in the light of the general economic history of England in the eighteenth century. The writer wishes to express his thanks to Major Frank Wedgwood for permission to work in the Wedgwood Museum at Etruria, and to Mr. Cook, the Curator, for his courtesy. This work has made possible some illustrations of the business development of the potteries.

all goods increased. But the new demand for pottery involved a change in fashion. Early in the seventeenth century Oriental porcelain began to displace pewter and plate from the tables of the very rich. This was soon followed by Delft ware—a Dutch imitation of porcelain—which was available to the middle class. The introduction of the fashion of tea and coffee drinking favoured the extended use of earthenware. The readiness of the industrial response to the stimulus of increased demand deserves some explanation. There was, of course, a tradition of craftsmanship in North Staffordshire going back many centuries, the skill of the early potter being proved by the excellence of the mediæval encaustic tiles. Moreover, like the Lancashire cotton men, the potters were free from the " obstructive inertia " of Gild control. There was, too, a social predisposition to innovation, which found expression in countless reform agitations and in the progress of rationalism in all the sciences. Perhaps the most important factor was that the diffusion of ideas was facilitated by the improvement of communication. Seeing that the fashion of using earthenware for the dinner-table was borrowed, it is not surprising that improvements in potting technology owed much to foreign potters; driven from their own country by religious persecution, they settled in London, where there was an excellent market and where they could procure the same English clays which they had previously imported. Thus a thriving manufacture of Delft grew up in the seventeenth century at Lambeth, Liverpool and Bristol. But Delft had little direct influence on North Staffordshire; its contribution was rather the development of a market, out of which it was later ousted by the new Staffordshire ware. It was Rhenish stoneware which most directly influenced English technical development, and exemplified best the diffusion of technology. This ware had been imported on a large scale since the time of Elizabeth. Its manufacture was early attempted in England, but John Dwight of Fulham seems to have been the first successful manufacturer. He took out patents in 1671 and 1684. In 1693–4 there was a suit in Chancery brought by Dwight against John and David Elers of Fulham, James Morley of Nottingham, Aaron, Thomas and Richard Wedgwood of Burslem, and Matthew Garner, for breach of his patent rights. This shows close communication between Staffordshire and London : Matthew Garner, a Staffordshire lad, had been apprenticed to a Southwark potter; the Wedgwoods supplied clay to the Elers of Fulham; and already stoneware was made in Staffordshire. Later, John Philip Elers

went to Staffordshire to be near the supply of his clay; in spite of his efforts at secrecy, the local potters learned much from him in the way of careful refining of the clays, the use of the lathe for finishing the ware, etc. Elers brought a refined taste into a centre of crude manufacture. How slow the diffusion of useful ideas might be is illustrated by the case of copper oxide—its colouring properties were known and used throughout England in the seventeenth century, but not till the middle of the eighteenth did the Staffordshire potters employ it. However, the new technology was not borrowed wholesale; progress was mainly dependent on experiment with the new ideas and new materials added to the old. The growing market provided the incentive; the increase in the scale of enterprise and the high profits gained made experiment possible.

Of the state of the industry at the end of the seventeenth century we have an admirable account in Dr. Plot's *Natural History of Staffordshire* (published in 1686). "But the greatest pottery they have in this country is carried on at Burslem, where for making their several sorts of pots they have as many different sorts of clay, which they dig around about the town, all within half a mile's distance, the best being found nearest the coal; and are distinguished by their colours and uses as followeth:

1. Bottle clay of a bright whitish streaked yellow colour.
2. Hard fire clay of a duller whitish colour, and fuller interspersed with a dark yellow, which they use for their black wares, being mixed with the
3. Red blending clay, which is a dirty red colour.
4. White clay, so called, it seems, though a blewish colour and used for making a yellow coloured ware, because yellow is the lightest colour they make any ware of.

All of which they call 'throwing' clays, because they are of a closer texture and will work on the wheel."

Though confined to local clays the Staffordshire potters had considerable variety; but it is interesting to see that their desire for a white body had to be satisfied with a name. Besides the clay, they had at hand the other materials of their craft, coal and lead. Coal was got with great ease from near the surface, the potter generally digging his own coal as he dug his own clay. As the industry made greater demands on the coal they had to dig open pits, and got into trouble with water. The cutting of a gutter usually solved the problem. Lead ore was obtainable

at Lawton Park, six miles from Burslem; it was sold at that time to the potters at £6 a ton.

The typical pottery consisted of a small thatched cottage with lean-to working sheds covered with sods, and an oven of a coped form some eight feet high and six feet wide, surrounded by a hovel of sods to conserve the heat. For the preparation of the clay there would be a tank or "sunpan," about twenty feet square and eighteen inches deep. In a corner, partitioned off, was a smaller deeper vat, where the clay, after due exposure to the weather, was "blunged," *i.e.* beaten about in water by a man with a huge oar. The large stones fell to the bottom. The mixture was then run into the sunpan, through a sieve, to a depth of about four inches, and there left to evaporate by the heat of the sun. When dry, more was added from the blunging vat till the clay thus dried was a foot or more thick. It was then cut and stored for use in a damp cellar. Before using the clay another process, called "wedging," was necessary to drive out air bubbles. The piece of clay was cut in two with a wire, then one piece was lifted above the head and brought down with as much force as possible upon the top of the other. This was repeated many times. After which they kneaded it like dough, and made it into balls proportioned to the size of the piece to be made. The potter then formed his piece on the wheel. The pieces were set outside to dry, or in foul weather by the fire. When dry, the handle was put on, and they were decorated by painting with liquid clay of a different colour, run on through a quill. For the glaze they dusted the ware with "smithum," *i.e.* lead ore beaten into dust and finely sifted. The ware was then ready for the oven, the coarser ware being exposed to the naked flame, the better ware placed in saggars—"metall'd pots of marle." The oven was generally fired once a week: fired on Friday, last stoking early on Sunday morning, then allowed to cool ready to be drawn on Monday morning The ware was sold straight from the oven to the travelling cratemen, who gave tallies for the amount. The cratemen loaded the ware into the panniers of their asses and filed away. In such a works there would be six or eight men and boys. There would be separate sheds for the thrower, the stouker, the decorator; but the division of labour was not carried far, every workman being competent to do any part of the work.

Dr. Plot's account, from which the above is derived, can be supplemented by a document in the Wedgwood MSS., which describes the size of the industry and the scale of the individual

works. In a letter to Lord Auckland, dated 1792, Josiah Wedgwood gives the result "of having examined some of the oldest men in the pottery here, near thirty years ago, who knew personally the masters in the pottery and very nearly the value of the goods they got up, fifty years before that. From these data I can pretty nearly ascertain the annual value of the goods made here at that time: which was something under £10,000 a year." He continues:

"Men necessary to make an oven of black and mottled per week, and other expenses:

	£	s.	d.
6 men, 3 at 4s. a week, and 3 at 6s.	1	10	0
4 boys at 1s. 3d.		5	0
1 cwt. 2 qrs. Lead Ore at 8s.		12	0
Manganese		3	0
Clay, 2 cart-loads at 2s.		4	0
Coal, 48 horse-loads at 2d.		8	0
Carriage of do. at 1½d.		6	0
Rent of Works at £5 per ann.		2	0
Wear and tear of Oven, Utensils, etc., at £10 p. a.		4	0
Straw for packing		1	0
The master's profit besides 6s. for his labour		10	0
	4	5	0

"N.B.—The wear and tear, master's profits and some other things are rated too high. £4 per oven-full is thought to be sufficient for the black and mottled works of the largest kind upon an average, as the above work was a large one for those times."

There follows a list of the pot works in Burslem about 1710, forty-three in all, producing a total of £140 of ware a week. The works varied from a weekly output of two to six pounds. Whether we look at the scale of the industry or the quality of the product, we feel justified in describing it as a "peasant industry."

The first step towards the transformation of the industry was the discovery of a white body, which the metropolitan and foreign markets demanded. Increasing communication with other centres led to a trial of clay imported from other districts. Crouch clay from Derbyshire, used by the Nottingham potters, was the first importation. This was soon superseded by clays from the south of England, first the pipe clay of Devon, then the superior tertiary clays of Dorset and Devon. News of these clays may have come from London, where Poole clay had long been sold. It was a considerable venture to use such distant clays when transportation was undeveloped. The clay was

shipped from Bideford to Chester, and carried thence by land. The improvement of the Weaver Navigation in 1720 made it possible to bring the clay by water to Winsford in Cheshire; pack animals carried it over the execrable roads and returned with crates of ware. The clay being expensive was first used as a white slip to cover the dull body, thus taking the place of the tin enamel on Delft ware. Soon after 1720 Thomas Astbury, of Shelton, added calcined flint to the Devonshire clay and made a body white all through. Here there is a bifurcation in the development according to the method of glazing. The first makers of this new ware used the traditional lead glaze of the district. But, as this imparted a yellow tint and partially spoilt the whiteness of the body, a later group of potters applied to this new body the method of salt glaze used for the brown stoneware. This proved a great success; by 1750 there were sixty small factories making it for a wide market, including Holland, the American Colonies, and the West Indies. Then the trade died; about 1760, according to Dr. Aikin, "this ware began to be rejected from genteel tables." The main line of development was via lead glaze. First the lead was more carefully prepared, then, in place of dusting the lead on, the ware was dipped in a thin slip of flint and clay mixed with lead; finally, Enoch Booth, of Tunstall (*c.* 1750), introduced the modern method of two firings, a preliminary or "biscuit" firing before the ware was dipped, then a second "glost" firing. This process proved simpler and more tractable than the salt glaze and was therefore cheaper; in addition, it was superior for the purposes of dinner ware because of its smoother surface. It was this new Cream Colour ware that Josiah Wedgwood took and perfected under the name of Queen's Ware. In 1767 Wedgwood wrote: "The demand for this said Cream Colour, alias Queen's Ware, still increases. It is really amazing how rapidly the use of it has spread over the whole globe." Cream Colour was the basis of the prosperity of the potteries. During the latter half of the century Josiah Wedgwood, John Turner, Josiah Spode, William Adams and a host of others were experimenting constantly with new clays—china clay and china stone from Cornwall being the most useful later addition. Lack of space makes impossible any mention of the development of other bodies in the second half of the century, basaltes, jasper, bone china, etc.

While the body and the glaze were thus improved, new methods of making and decorating the ware added to its chance of commercial success. The use of the lathe to give a more perfect

finish to the article taken from the wheel had been learnt from John Philip Elers. Two new methods, pressing and casting, made possible a great variety of shapes. Moulds, or blocks, were cut in alabaster, and from these were made "pitcher," *i.e.* porous clay moulds, which were the working moulds and were renewed as they wore out from the alabaster block. Pressing is the method of shaping pieces of pottery by pressing thin cakes of clay into these pitcher moulds. For casting the clay was run into the mould in a liquid state, and after a few minutes run off again, leaving behind a shell of clay adhering to the mould, which was taken out when dry. About 1745 Ralph Daniel, of Cobridge, introduced plaster of Paris for making the blocks and working moulds. The making of blocks soon became one of the most important parts of the potter's craft; mostly the master potters made their own, but Aaron Wood was a distinguished specialist block-cutter working for many masters. Improved methods were not enough, they had to be directed by a superior artistic sense. Josiah Wedgwood, commenting on the state of the industry when he was beginning (*c.* 1750), writes: "White stone ware was the principal article of our manufacture. But this had been made a long time and the prices were reduced so low that the potters could not afford to bestow much expense upon it, or to make it so good in any respect as the ware would otherwise admit of. . . . And with regard to Elegance of form, that was an object very little attended to." Wedgwood and his contemporaries raised the standards of artistic as well as technical achievement.

In decoration a similar advance is seen. Two Dutchmen settled at Hot Lane and began to enamel Staffordshire ware, reproducing the designs of Oriental porcelain. They tried to keep their methods secret, but Ralph Daniel brought in enamellers from the centres of the old Delft and the new china manufacture, Bristol, Chelsea, Liverpool and Worcester. Enamelling located at Hot Lane as a subsidiary trade to the potteries. Josiah Wedgwood sent his early ware to Mrs. Warburton of Hot Lane for decoration; later he had his own establishment for enamelling at Chelsea. The method of transferring a printed design to earthenware, invented by Sadler and Green of Liverpool in 1755, gave an alternative decoration for the cheaper ware. Later the two methods were combined, the painter filling in an outline laid by the printer. At the end of the century the invention of blue printing under the glaze provided a decorative plate at a very moderate cost, making the fortune of Josiah Spode and others.

But, again, all depended on the artistic sense of those who directed these new methods. Wedgwood selected a staff of competent artists to cut his blocks and make his designs. He set a high standard, and his competitors rose to it.

Invention was busy in the whole field of pottery; a local mechanic named Alsager improved the potter's wheel. "A boy turns a perpendicular wheel which by means of thongs turns a small horizontal one just before the thrower" (Arthur Young). Ralph Shaw of Burslem invented the process of drying his clay on a shallow kiln heated by flues running underneath, a great advance on the primitive sunpan. The method of grinding flints was revolutionised by Thomas Benson, a London house-painter, in 1726. When ground dry the dust had been so noxious that it became difficult to get labour for grinding. Benson eliminated the dust by grinding the flints in water, applying his knowledge of colour grinding to the problem of the potteries. His first specifications called for iron balls, but when this was found to cause impurities, stones were substituted. The bigger potters ground their own flints; the majority bought flint in slip form from the mills which sprang up near-by in the Moddershall valley. The oven came in for improvement too. When Wedgwood started on his own at the Ivy Works (1759) he pulled down the ovens for some slight improvement, and then pulled them down again for further alteration. As the potters strove to improve their ware they realised the importance of accurate control of heat of the oven. A series of inventions for measuring high temperatures were made; in 1740 John and Thomas Wedgwood introduced their "pyrometric beads," which recorded changes of temperature by colour change. Other attempts to deal with this problem were made by Whitehurst (1749), Ellicott (1750) and Smeaton (1754). In the correspondence of Josiah Wedgwood there is constant reference to this difficulty. "In a long course of experiments for the improvement of the manufacture I am engaged in, some of my greatest difficulties and perplexities have arisen from not being able to ascertain the heat to which the experiment pieces had been exposed." This difficulty became more important as he came to the more delicate ornamental wares. Wedgwood tried measuring heat by colour change, then by expansion. He achieved such a measure of success that he was elected a Fellow of the Royal Society. It would be interesting to examine the relation of technological progress in the eighteenth century to the progress of pure science. Josiah Wedgwood, the leading master potter, corresponded with Dr. Darwin and Joseph

Priestley; but his debt to them was rather for their encouragement in constant experiment than for directly useful information.

The technological revolution in the potteries presents a strong contrast to the mechanical revolution in textiles. The product was never completely standardised. Though the correspondence of Wedgwood shows him alive to the advantages of standardisation, the tendency was opposed by the character of the market and the character of the process. Skill remained predominant: in 1798 direct labour cost at Wedgwoods' was 40 per cent. of the value of Useful ware, and 67 per cent. of the value of Ornamental. The new ideas, not being embodied in machines, were difficult to patent. And there was little of that mechanical compulsion to proceed from invention to invention, as when the improved loom called for more yarn and thus for improved spinning machinery. But, when the introduction of flint necessarily led to Benson's invention for avoiding the noxious dust, or when the increasing delicacy of the work made necessary accurate measurement of temperature, here too was "invention the mother of necessity." In the prevailing spirit of invention and experiment, and in the development of business organisation, Burslem, Birmingham and Manchester are alike.

The expansion of the market led to production on a larger scale. The first recorded effort at enlarging the output of the works took the form of building a bigger oven, which to the delight of the conservative potters collapsed. Soon manufacturers began to build a row of ovens; the Baddeleys excited jealous ridicule by building a row of four ovens; while in 1743 Thomas and John Wedgwood gave greater cause for scorn by not only building a works with five ovens, but even going to the ridiculous expense of covering it with tiles. In spite of this wild extravagance they were able to retire, in 1760, with a comfortable fortune. Of the size of the typical pottery, and of the scale of the industry, there are various estimates. In a petition for a Turnpike Act (1762): "In Burslem and its neighbourhood are near 150 separate potteries for making various kinds of stone and earthenware, which together find constant employment and support for near seven thousand people. The ware from these factories is exported in vast quantities from London, Bristol, Liverpool and Hull to our several colonies in America and the West Indies, as well as to almost every port in Europe." An account of Arthur Young in 1769 gives, I believe, an over-estimate of the number of works and an under-estimate of their average size: "I had the pleasure of viewing the Staffordshire

Potteries at Burslem and the neighbouring villages, which have of late been carried on with amazing success. There are 300 houses, which are calculated to employ upon an average twenty hands." From Josiah Wedgwood there are several estimates: in *The Case of the Staffordshire Manufacturers*, during the opposition to the extension of Champion's patent (1775), Wedgwood gave the annual exports as £200,000. In 1785, before a Committee of the House of Commons, he stated that 15,000 to 20,000 men were employed. In the letter, previously quoted, to Lord Auckland, he gives £300,000 as the total product of the district. In another place he gives the potter's average weekly consumption of coal at ten tons; from comparison with his own accounts this would seem to indicate an average annual product of £5000. An average leaves much untold; no doubt there persisted many small works, but there also developed many big ones. The three potters who gave evidence before the Committee on the Orders in Council (1812) were all large-scale producers. In spite of the loss of European markets, Wedgwood's sales in 1810 were £43,474, and he employed 478 wage-earners. Mr. Hamilton had reduced his staff from 400 to 210, Mr. R. Stevens from 150 to 100. Expansion by buying up other works is also obscured by an average, *e.g.* William Adams of Stoke had five works.

A most realistic picture of the state of business development towards the end of the eighteenth century is presented in the surviving business papers of the firm of Josiah Wedgwood. One of these papers gives a detailed statement of the financial results of trading for the first half of 1798. A summary of this follows:

Manufactory Useful.

Produce.	£	*Charges.*	£
Sales at Etruria	6,347	Wages	3,067
Sent to London	4,254	Coals	997
Sent to Liverpool	121	Clay	315
Sent to Enamel Works	642	Flint	455
	11,364	Lead	380
		Packages	375
Less discount	1,603	Carriage	432
		Incidental	145
Net Produce	9,761	Goods bought	119
Charges	7,706	Rent	201
		Proportion of general charges	244
Profit	£2,055	5% on account produce for charges not yet brought in	488
		5% for subsequent loss	488
			£7,706

Manufactory Ornamental.

	£
Net Produce . .	1,591
Charges . . .	1,516
	£75

The Useful and Ornamental branches do each other's business, and the balance is in favour of the Ornamental. From London it appears that the increase in stock is chiefly in articles Ornamental. Therefore this branch appears to be carried on without profit.

Enamel Works.

	£
Net Produce . .	2,398
Charges . . .	1,503
Profit	£895

Total Profits £3,025. Total Debts £7,539. Debts received £7,370.

London Warehouse.

	£
Sales	8,543
Ready money	2,005
Debts in London	6,538
Received for debts	9,211
Decrease in debts	2,673
Income of Warehouse :	
20% on Useful ware ; 40% on Ornamental and Enamel	2,308
Charges	1,903
Profit	405
Increase of Stock, less 9% for expenses of sale .	864
Total Profit	£1,269

This gives a total profit for London and Etruria of £4,294. But the increase of stock is too big, so write off £372, leaving a profit of £3,922. Set aside reserves.

	£
Useful	976
Ornamental	159
Enamel	180
London	427
	£1,742

These accounts speak for themselves; they show a pottery of considerable size conducted on modern business principles. Accurate record was kept of costs, and the case of the Ornamental branch subjected to close scrutiny. A letter of 1776 had shown Josiah Wedgwood "puzzling his brain all the last week to find out proper data and methods of calculating the expense of manufacture, sale and loss, etc., to be laid upon each article of our manufacture."

Some comment on the London Warehouse is called for. The

simple method of the peasant potter selling straight from the oven to pedlars had given way to newer methods; the potters had become merchants. They began soon after 1720 to establish business relations with London, Liverpool and Manchester, consigning goods to general dealers in these towns. They then entered the foreign markets already opened by the merchants of these towns. They adopted the custom of the more developed trades of sending "riders out"; but the early rider kept no accounts, simply emptied his pockets on his return, deducted his wages and handed the remainder to his master. As the industry grew, business methods developed. Wedgwood had his London Warehouse, which became a fashionable lounge. Turner had a depot in Holland, with a staff of native painters to decorate the ware in the native style. In their market fashion meant much, and Wedgwood was successful in securing such distinguished patronage as turned fashion in his direction. "If royal or noble introduction be as necessary to the sale of an article as real elegance and beauty, then the manufacturer, if he consults his own interest, will bestow as much pains and expense too in gaining the former of these advantages as he would in bestowing the latter." Along with that of the other new trades their market was limited by foreign tariffs, and the master potters are found co-operating with Birmingham and Manchester to open new foreign markets by commercial treaties, *e.g.* the Eden Treaty with France, 1786.

Above all they needed cheap, easy transportation. Wedgwood was the keenest promoter and the Treasurer of the Grand Trunk Canal. Without this new method of bringing in their bulky materials and sending out their fragile ware the potteries could not have developed as they did. The improvement of communication was also of importance to business: in 1740 mail was brought to Burslem every Sunday from Newcastle; by 1760 it was brought three times a week by a man on horseback from Stone; in 1802 there was a daily mail to London and Liverpool. There were daily coaches from Burslem and Hanley to London, Liverpool, Manchester and Birmingham. There were also a large number of stage wagons, Twiss and Wakeman being the two important carriers. The following letter shows the terms on which Wedgwood exported:

"I beg leave to acquaint you that being a manufacturer only in an inland county I do not send my goods abroad on risque, but my foreign correspondents name me a house in England to accept my draft on my sending that house bill of lading of the goods being shipped, and that house being my guarantee, when the order is given it is executed without loss of time. I shall be glad if this

mode of dealing may be convenient to you, but if not, when you send me a bill of exchange, I will as soon as it is accepted dispatch your goods to the amount. I deduct discount of 15 per cent. for prompt payment, and I pay the carriage to Hull, but not the expenses of shipping."

A good deal of credit information about customers was exchanged between Birmingham and Etruria.

Turning from finance and sales to the internal organisation of the factory, we find a minute division of labour, and the development of factory discipline and control. Here Wedgwood learned much from Matthew Boulton. An account of the hands employed in the Useful branch of the Etruria works in 1790 illustrates the degree to which specialisation had gone and gives interesting data on wages earned.

Slip House.	Looker over 14/-. Man to clean and break clay 8/-. Four slip makers 10/6. One slip maker 12/-. Boy 5/-.
Clay Beaters.	Two men 11/6.
Throwers.	Three apprentices 3/6, 17/-, 18/-. Three boys to make balls 2/6, 4/6, 5/-. Three boys to turn wheel 2/-, 2/9, 4/-.
Platemakers.	One man 7/-, eight on piece-work. Three boys 2/-, 2/-, 1/-. Six boys paid by the men.
Dish Makers.	Inspector 18/-. Two men piece-work; one man 9/-.
Hollow Ware Pressers.	Five men on piece-work. Three apprentices on piece-work. Three boys paid by the men.
Turners of Flat Ware.	Seven men, piece-work. Six boys paid by the men.
Turners of Hollow Ware.	Three men, piece-work. One man 10/6. Three apprentices 2/-. Seven children to turn lathes, 2/6—4/-.
Handlers.	One inspector and handler 10/6. One piece-worker 15/-; one 2/9. Boy to make spouts 1/-. Two apprentices 2/6.
Biscuit Oven.	One fireman, piece-work. Four men 12/-. One to get in coal 8/-.
Glost Oven.	Two dippers 12/- and 15/-. Three brushers 1/3, 2/-, 2/3. Two placers and firemen 18/-. Two boys paid by the men. One boy 4/6.
Glost Warehouse.	Inspector and repairer 10/-. Girl assistant 3/-.
Enamelling and Painting.	Two girls colour grinding 5/-, 2/9. One man painter 16/-. Three girls, painters, 2/9, 6/-, 6/-. Two apprentices 2/-. Enamel foreman 10/-. Two gilders, piece work.
Getter in of Coals for Workhouses.	8/-.
Four Odd Men.	4/-, 7/-, 9/-, 9/-.
Warehouse.	Superintendent and looker-out 18/-. Two lookers-out 10/-, 14/-. Three dressers and sorters 6/6, 9/-, 9/6. Two carriers 3/-. Four packers 9/-.
Counting House.	Three men and two apprentices.

One modeller, one mould-maker 12/-. One looker after moulds 15/-. Two saggar makers, piece-work. One cooper 12/-. Two in lodge 12/-, 2/-. Two inspectors, one looks after ware, the other after wages, etc.

The total number of employees in this branch was 160. A similar account for the Ornamental branch shows 110 workers,

and the various departments, jasper, black, etc., have their special staffs. The division of labour had been carried far. Two memoranda dealing with the duties of the porter and certain disciplinary regulations complete this account of the factory.

"Business of a Porter. From Lady Day to Michaelmas.
Ring bell 5.45.

Chime	6–6.10 a.m.	admonish those who are not at work at that hour.
	6.20 ,,	shut door till breakfast time, take book around and check attendance.
	8.30 ,,	bell for breakfast.
	9.00 ,,	a little before, bell for work again. Admonish after 9.10, shut door at 9.15.

Porter to have meals at the same time as the men, a clerk taking his place.

Might have a system of tickets to save porter going round works, or list of names in the lodge and the porter marks with chalk.

If working overtime, 6–6.30 p.m., supper.

Michaelmas to Martlemas. The first bell is to be ¼ of an hour before they can see to work, and the last bell when they can no longer see.

The porter is to weigh coals, marles, straw, etc. To deliver brushes, files, caskets, candles, oils, etc. to the workmen.

"The firm must keep a stock account and a sales account, into which every article sold, though ever so trifling, is to be entered. There is to be a money till in the table into which the money must be put, never into his pocket. The stock and sales books are to be frequently compared in particular articles, and a general stocktaking in the Christmas holidays."

"Some regulations and rules made for this manufactory more than thirty years back (1810).

Any person seen throwing within the grounds of the manufactory to forfeit 2/6.

Any person leaving a fire in their rooms at night to forfeit 2/6.

Any workman leaving scraps in their rooms, so as to get dirty, to forfeit 2/-

Any workman striking or otherwise abusing an overlooker to lose his place.

Any workman conveying ale or liquor into the manufactory in working hours, forfeit 2/-.

Any person playing at fives against any of the walls where there are windows, forfeit 2/-."

The "new discipline" seems to have been mitigated by an occasional game of fives.

V. W. Bladen

University of Toronto.

THE DOMESTIC SYSTEM IN THE EARLY LANCASHIRE TOOL TRADE

In a chapter of his Autobiography James Nasmyth, the engineer, describes the organisation of the metal trades of West Lancashire in the 'thirties of last century, and refers, in particular, to the firm which is the subject of this article.

> "The 'P S,' or Peter Stubbs' files, he says, were so vastly superior to other files, both in the superiority of the steel and in the perfection of the cutting, which long retained its efficiency, that every workman gloried in the possession and use of such durable tools. Being naturally interested in everything connected with tools and mechanics, I was exceedingly anxious to visit the factory where these admirable files were made. I obtained an introduction to William Stubbs, then head of the firm, and was received by him with much cordiality. When I asked him if I might be favoured with a sight of his factory, he replied that he had no factory, as such; and that all he had to do in supplying his large warehouse was to serve out the requisite quantities of pure cast steel as rods and bars to the workmen; and that they, on their part, forged the metal into files of every description at their own cottage workshops, situated in the neighbouring counties of Cheshire and Lancashire." [1]

Here is testimony to the hold which the factory system had obtained in English industry. Familiar as he was with great iron-foundries and engineering works, Nasmyth regarded a large physical unit of production as typical, and was accordingly "surprised as well as pleased" to find in the smaller metal trades so different an order. In the textile area of South-east Lancashire the domestic system had been rapidly superseded by the factory system; in the west of the county domestic production had thriven for centuries, still flourished, and was destined to survive, in a somewhat attenuated form, it is true, to the present day.

[1] *James Nasmyth, Engineer, an Autobiography*, ch. xii. Nasmyth mis-spells the name. Peter Stubs was no relative of the Stubbs who, upon being knighted, is said to have written his name St. Ubbs!

During the eighteenth century, as now, the metal industries tended to congregate on the coal-fields; and where, as in Lancashire, there was little production of iron and steel these were brought in from other districts.[1] Steel was purchased for the tool-makers of this area from Sheffield and Newcastle-on-Tyne, where crucible cast steel was made from charcoal-iron brought overseas. In the second half of the eighteenth century district specialisation had been carried far: watches and watchmakers' tools were made at Liverpool and Prescot, nails at Chowbent (Atherton) and Leigh, pins, files and wire at Warrington, and locks and hinges at Ashton-in-Makerfield. Possibly as a result of its geographical position, the last of these towns had become a commercial centre for the metal area, which extended north as far as Wigan, south to Warrington, east beyond Leigh, and west to Liverpool: it was through dealings with Ashton merchants that Peter Stubs was enabled to rise to the position of a large manufacturer.

The earliest records of the firm consist of four small memorandum books, and it is clear from these that Peter Stubs was then a craftsman working, with a single apprentice in a small shop in Warrington, to the order of wholesale ironmongers. Between January 23 and February 20, 1777, he cut 30 dozen watch files of various sizes for William Barrow of Prescot: these were priced at £3 19*s*., but a trade discount of 25 per cent. was allowed, so that Stubs actually received £2 19*s*. 3*d*. Between April 10 and July 2 he made 72 dozen, for which he received £10 8*s*. 6*d*., less 25 per cent.—payment being made in three instalments—and so on throughout this and the following four years. At the same time similar relations existed with Chorley and Leech of Ashton, who, like William Barrow, supplied the filemaker with steel. In both cases the steel was purchased: Stubs was debited with its value and credited with the finished files, which were delivered to the ironmongers by post or by the hand of the apprentice. The accounts are very roughly kept, and it is not possible to make an estimate of Stubs' income; but it was certainly small, for his wife Mary washed each week shirts (at 2*d*. each) and stocks (at ½*d*.) for Thomas Sutton, who, with his wife, lodged in Stubs' house for several months. Since the entries relating to steel cease in 1780, it seems possible that Stubs now bought it from others; instead

[1] It is not surprising, therefore, that when the question of free importation of pig-iron from the American colonies was debated in 1750, the "Ironmongers, Hinge-makers, Nail-makers, Lock-makers, Hoe-makers and Smiths in Ashton, Chowbent, West-Leigh and Warrington" petitioned in favour of the proposal. *Commons Journal*, XXV. 1098.

of receiving payment by instalments as the work proceeded, he waited till the order was complete and was paid by bill. In 1781 he had orders from Chorley and Harrison, and in the following year from Peter Atherton of London; though these were small compared with those given by the Prescot and Ashton firms, it is clear that he was beginning to exercise rudimentary commercial functions.

From this point there is a break of six years in the records, and when Peter Stubs again comes to view he is the prosperous landlord of the " White Bear " Inn of Bridge Street, Warrington. He buys barley and hops, owns malt kilns in the Buttermarket and Sankey Street, and retails hops, malt and ale to numerous customers. Nevertheless the file business still occupies the greater share of his attention. Assisted by three or four workmen, he continues to produce files at his inn, and in addition he finds employment for out-workers in other towns. By 1791 he is well established as a master-manufacturer, and in the following year he consults with other filemakers, like Green of Liverpool, with a view to regulating the prices of Lancashire files. His own have won such a reputation that unscrupulous filesmiths in Sheffield have begun to stamp *P S* on their files. And though he still disposes of the bulk of his wares through wholesale ironmongers like William Harris, Chorley and Peet, Clowes and Whitley, and Clough and McGuffog—all of Ashton—he is travelling the country and has connections in all large centres of population.

The story of the expansion of his market is not without interest: deliberately he spreads his orders for cast steel among a number of Sheffield converters and refiners; and, as most of these are also factors or merchants, there is an understanding that each shall buy files of him in return. Later he has similar relations with Walker and Booth of Rotherham, Isaac Cookson of Newcastle, and—through David Mushet—with the Calder Iron Company. William Chamberlain, wholesale ironmonger of Skipton, purchases large quantities which he supplies to retailers in the northern counties; but there is a persistent tendency for the manufacturer to get into personal touch with shopkeepers and large consumers. Among the great industrialists to whom his files were sold direct were the Duke of Bridgewater, the first Sir Robert Peel, Samuel Greg of Styal, the Darbys of Coalbrookdale, Matthew Boulton of Soho, and the Carron Partners. As time went on Stubs supplied awls, pliers, compasses and other Lancashire tools; but, throughout, his own small high-grade files remained the staple product.

In the days before the introduction of the emery-wheel and modern methods of moulding the file occupied a far more important place in industrial processes than now. Files were used not only by sawyers, clockmakers, cutlers and other long-established craftsmen, but also by cotton-spinners, millwrights, engineers, and, in fact, by all who made or used machinery. Stubs was fortunate in setting up in the trade at a time when the textile and iron industries were entering upon their lusty youth; and this, no less than the quality of his product, accounts for the steady growth of the undertaking. A Workmen's Book indicates that in 1805—the year before his death—between £75 and £100 a week was paid in wages at Warrington, and between £30 and £40 at Farnworth, a convenient centre for the out-workers in the villages between St. Helens and Widnes. It is not possible to make any estimate of profits, but some indication of turnover is afforded by Stubs' dealings with his bankers, Messrs. Parr, Lyon & Co., [1] though many cash payments would not go through the bank account. In 1805 the Pass Book shows that bills aggregating £6,883 5*s*. 10*d*. were paid in, and in the boom year of 1815 the firm, under Stubs' sons, received from customers remittances amounting to £17,493 11*s*. 1*d*.

It is, however, as regards industrial organisation that these records are most illuminative. Filemaking consisted then, as now, of several distinct processes. Rods of steel were first forged into file blanks; these were then annealed and smoothed with a large file to remove irregularities and any scale left upon them from the forging process. Next the file was cut: the blank was placed on a block of pewter—obtained by melting down measures and tankards which were no longer of service to the "White Bear"—and the indentations were made by hammer and chisel. Hardening was effected by dipping the file in malt dust, or in "barm bottoms" from beer barrels, heating in a small furnace, and, when white-hot, plunging it into a solution of salt and water. With all deference to metallurgical opinion, it is suggested that carbon from the malt dust or barrel dregs entered the teeth of the file and that something like what is now known as case-hardening resulted. This, at least, is the traditional explanation of the early superiority of the *P S* file. After hardening, the files were cleaned, tested, oiled and packed in stout paper.

A Workmen's Book beginning in 1788 shows that Stubs was already providing employment for two out-workers, and within

[1] Messrs. Parrs—now merged in the Westminster Bank—originated in Warrington in 1788.

a few years for a numerous body. Most of these were in the same economic position as their employer ten years earlier: each had his own shop and was assisted by one or two apprentices: each was debited with the value of the steel and with that of any tools and material supplied—large Sheffield files for smoothing, anvils, pewter, malt dust, oilstones and so on. And each was credited with the value of the finished work—reckoned from established price lists—less the customary 25 per cent. discount. Every week, or fortnight, a cash payment was made, determined apparently by the need of the worker rather than by the work performed during the period; and every two or three months the account was balanced. The workman was paid any surplus due to him, or, if there were a debit balance, it was carried to the next account. Since weekly payments varied considerably it is necessary to consider earnings over a fairly long period. During fourteen months following January 20, 1788, Thomas and William Appleton of Huyton were credited with files valued, after discount had been deducted, at £166 5*s.* 6*d.*; they had received in materials £49 8*s.* 1½*d.*, and their joint net earnings were, therefore, £116 17*s.* 4½*d.* Similarly during a period of sixteen months beginning April 3, 1788, William Turner's net earnings were £33 11*s.* 7*d.*

The occasional letters of the less illiterate of these workers give a vivid picture of domestic industry at this period. In October 1791 Carolus Charles of Aughton, a domestic filemaker assisted by his sons, wished to sever his connection with Green of Liverpool and to move to Warrington. Since March 1789 he had occasionally made files for Stubs, and, as a means of obtaining more regular employment, Charles undertook to supply fourteen files to the dozen if "soft," or thirteen if hardened. The question of the number of units in a dozen had frequently given rise to acute disputes in the Sheffield file and cutlery trades, and in 1787 one of these had drawn from Joseph Mather, the file-cutter versifier, his (locally) famous tirade against Master-Cutler Watkinson: [1]

> "May those be transported or sent for marines
> That works for big Watkinson at his thirteens."

Little wonder then that Carolus Charles asked that the arrangement might be kept "a profound secret," and that, when a rumour of it spread among the file-workers of Liverpool, Charles was

[1] See G. I. H. Lloyd, *The Cutlery Trades*, p. 241, and *The Songs of Joseph Mather* (ed. Wilson), p. 63.

held up to derision. But even this was preferable to the situation he found himself in with Green :

> " Yesterday week " (he wrote, January 1, 1792), " I had not my due by near half, yesterday the same, he will pay only 10*s.* pound of the Clear neat Cash when all is deducted, and I can't take truck for the remainder at his price."

But release was difficult, and on July 31 Charles was still tied :

> " Have had another summons from Mr. Green. I believe he is very ill at want for files and wonders I neglected him so long. If he searches his breast he may soon know . . . he is for bringing an Exorbitant bill against me. His way of tradeing has been very intricate. When any cash of any acct. was to be paid he neither cou'd nor wou'd he said pay it Stormingly saying I pay you more money than any one, then paying what he thought proper . . . and if importuned for a bill fly in a passion and tell you he had more plague with you than any body else, after you had travel'd ten or 12 Miles in the night and not a dry thread on you and set in his warehouse for 6 or 7 hours without being ask'd what you want. I wish I was well out of his clutches. . . ."

The difficulty was that Carolus Charles, like most of his fellow filesmiths, was chronically in debt to his employer. Week by week he had received round sums in money and goods against which the files had been set in part payment. He offered to pay off his debit balance at three guineas a month, but Green demanded immediate payment, or alternatively that Charles should continue to work for him until the full debt should be paid in files. Peter Stubs, apparently, came to the rescue. Thereafter bundles of steel were sent from Warrington fortnightly to the " Horse and Rainbow," Liverpool, where Carolus Charles, his wife, or one of his lads called for it; and every fortnight fifty or sixty dozen files were sent to Stubs, who remitted four or five guineas by the carrier, stopping a guinea each time towards meeting the debt he had taken over from Green.

One of the sons of Carolus Charles was violently disposed : he assaulted first his brother, then his landlord, and finally he was lodged in Chester Gaol, charged with an offence against a woman in Liverpool for which he was subsequently hanged. The expense which his father was put to in supplementing the prison diet of bread and water, and of attending the Assizes, necessitated

further borrowing, and it is easy to see how such a series of misfortunes might tie a man permanently to his employer.

Not only such shattering events but minor domestic disturbances might be the occasion of indebtedness: "Sir, this is to inform you that my wife is deliver'd of a Child and I shall be glad if you will assist me at this time," wrote William Lancelot of Liverpool, March 16, 1795. The solatium requested was the now well-established thirty shillings. Again, it is not difficult to imagine how an innkeeper like Stubs might soon find himself a creditor to his workers: although there is no evidence of a real truck system in his enterprise, workmen were frequently debited with beer and rum.[1]

Moreover, fluctuation of employment was very marked during the French wars. For some time James Lyon, awlmaker of Stockport, had worked exclusively for Stubs—unlike most other out-workers he had borrowed instead of buying his tools—but in the late months of 1795 there had been little for him to do.

Stockport,
December 17, 1795.

"Sir,

I rec'd your letter yesterday. I am in good Health but have been mutch uneasey at your silence so long. I thought I had offended that you wou'd not imploy mee any longer. I have tould Mr. Ouldknow and hee will give mee work after Christmas. So I intended to a maid you sum work in the Holodays for what I owe you and to a return'd your Tools. But I will never leave you while you will Imploy mee. I will never Bastard my Promes to you. Your abstance has been no profit to mee though I have sould sum and I have a Quantaty under hand of most usefull sorts and will bring you all I can next week's end. I must beg you will send mee letter to receive 3 Guineas for its a long time since I rec'd mutch. If you will grant my Desire I will bee under a heavy stopidge that shall suffice you. I will not send any more by any Body for I will bring them every other Saterday if God Permit.

"I remain your Hble Srvt. Jas. Lyon."

The domestic workers were clearly of different types, varying from the individual working in his own home to the master of a

[1] A "Statement of the Workmen's Account" made December 31, 1810, shows that of 77 employees, 61 were indebted to the firm for an aggregate sum of £256 0*s.* 6¼*d.*, one owing no less than £28 15*s.* 10¼*d.*: the remaining 16 workers were in credit to a total of £20 2*s.* 3*d.*

moderate-sized workshop giving employment to several apprentices and journeymen. It is only by a tedious process that one can ascertain the annual net receipts of any out-worker; figures have already been given for two in 1788, and others have been taken out for a few of those employed in 1813. During the twelve months Peter Whitfield, filesmith of Ditton, for example, earned £58 2*s.* 7*d.*; his son, Peter Whitfield, Junior, £23 15*s.* 3*d.*; and William Dennett £40 0*s.* 5*d.* Others, making Lancashire tools, who would have to pay wages out of their receipts, received rather more. James Geakes, a maker of compasses and dividers, was paid £83 7*s.* 2¾*d.*, less approximately £5 for materials; and William Hornby, manufacturer of clockmakers' tools of Prescot, £310 12*s.* 8*d.*, less about £15 for iron, steel and files supplied by Stubs. At first sight one is tempted to regard men like Hornby as something more than out-workers. Yet, though they received substantial remuneration and employed others, they had little in common with the capitalist-entrepreneur. Their raw material was purchased of Stubs in small quantities, usually to satisfy the requirements of a particular order; they bore none of the risks of the market; they supplied no credit, but were paid on delivery of the finished goods; and they sometimes gave an undertaking that they would serve no other firm. In all these respects they were typical domestic out-workers.

Side by side with the system hitherto described it is possible to trace the growth of another with slightly different features. In 1802 Stubs decided to concentrate some of his labour, and accordingly built the premises still occupied by the firm in what is now Scotland Road. Buildings were erected round three sides of a cobbled yard. On one side the ground floor consisted of three forging shops, above which were cutting-rooms; another side was occupied by the hardening and finishing shop; and the third was the warehouse. Real, if small, benefits must have been obtained from drawing scattered workers together into a single workplace. Supervision was now possible and division of labour was facilitated. Here and there, it is true, domestic workers had confined themselves to a single process: in 1791, for example, James Molyneux of Prescot, and in 1801 John Heyes of St. Helens, were given blanks to file and cut; and in 1804 D. Edleston of Liverpool confined himself to forging blanks. But such specialisation was unusual, for quality might suffer if cut files were moved about the countryside before being hardened. Once a manufactory had been set up there was no difficulty. On January 5, 1803, eight specialised file-cutters and one forger agreed

to serve Stubs, on specified terms, for two years, " or till such times as we Respectively or Individually pay what we now owe or may owe "; and a month later a similar engagement was made with ten other file-cutters. At the same time eleven apprentices were taken for seven years: payments rising from 2*s.* a week in the first year to 7*s.* 6*d.* in the seventh were promised, but food, clothing, lodging and medical attention had to be provided by the parents. Benjamin Jolley, who had served Peter Stubs from the first days, was still working as a hardener and finisher, and perhaps now assumed the additional task of supervising the apprentices.

The interest of the new organisation is that it illustrates a definite step in the evolution of a wage-earning class. The worker now receives a money wage instead of being paid a price for his product. Furthermore, there is an understanding that the employer will provide regular work, and this is made explicit in the agreement of February 1803.

It would be wrong, however, to suggest that this year marked the transition of the firm from a domestic to a factory organisation. The bulk of the files and tools were still made by out-workers, and hence the statement of William Stubs to Nasmyth was substantially, if not literally, true. And even the Warrington workplace did not constitute a factory in the modern sense, for no power was installed: it was an example of that intermediate stage termed —not very happily—the manufacturing system, as distinct from the domestic system on the one hand and the factory system on the other. Such manufactories were by no means new in the metal trades, for as early as 1690 Ambrose Crowley had established a much larger concern with a similar organisation at Winlaton, near Newcastle-on-Tyne. Since 1803 the firm of Peter Stubs has continued to employ workers under both systems, though the introduction of file-cutting machinery in the late nineteenth century has caused a steady decrease in the number of out-workers.

In some branches of industry the possibility of harnessing water or steam led to an early adoption of factory methods; in such cases the transition held spectacular features which have rightly arrested the attention of the historian. But where, as in filemaking, there were technical difficulties in the way of machine methods—and where, after these had been overcome, the hand-made product was still considered superior—less was to be gained by concentrating workpeople in a single set of buildings. In these industries only very slowly has an employing class relieved the worker of the obligation of providing tools and

workshop—very slowly has an independent, weekly wage-earning class come into being. Or, for those who prefer it so, only very slowly has labour been divorced from capital and deprived of a share in the control of industry—only slowly has a proletariat evolved.[1]

T. S. ASHTON

[1] For a fuller discussion of the reason for the survival of small business units see G. I. H. Lloyd, *The Cutlery Trades*, to which volume this article may perhaps serve as a footnote. By the kindness of J. Aylmer Frost, Esq., the Stubs records are now housed in the Lewis Library of the Faculty of Commerce in the University of Manchester.

THE COTTON MARKET IN 1799

THERE is little justification for attempting to catch a glimpse of the organisation of a market at a particular point in its history unless, like the cross-section of the botanist, the specimen presented manifests a departure from the normal, or marks the initiation of a new stage of development, or shows obedience to natural laws of growth so that it records within itself something of its history. Two of these features of justification may fairly be claimed for an examination of conditions in the cotton market at the close of the eighteenth century. An interesting stage of development had been reached when the Liverpool market became dominant over its rivals, and when, in the direct distribution of cotton to spinners, it entered into partial competition with the secondary market at Manchester. Again, a new phase was about to be entered upon as the supplies of the saw-ginned American cotton became the chief subject of dealings on the market. And, in the meantime, it is possible to trace the lines of growth along which, although in primitive and uneven fashion, the mechanism of the market evolved.

By 1799 Liverpool had already established itself as the premier market for cotton. It is true that London was not far behind, and Glasgow and Bristol were still important, but each new development tended to emphasise Liverpool's advantages and to confirm its position. Manchester was the great distributing centre, maintaining a large number of cotton merchants and dealers who were jointly concerned, for it is not easy to lay down precise lines of demarcation of the two groups, in the retailing of cotton to the spinners. The smaller spinners were bound to the Manchester middlemen because of the credit given by them; if there was to be direct dealing with Liverpool it could only be on the part of the bigger firms whose larger capital gave them independence. At Liverpool cotton was sold directly by importers and by dealers, as well as through general brokers and cotton brokers. But the direct sale by importers was fast disappearing as the dimensions of the trade grew; the general brokers hung only upon the margin of the trade; and the dealers, who seem to

have retailed cotton to those mills which were within a short radius of the port, were of negligible account. There were at least six specialist cotton brokers, and through them the bulk of the business was transacted. In turn, the lion's share fell to one Nicholas Waterhouse,[1] who acted both as selling and as buying broker and who had already been in business for seventeen years.

The clientèle of Nicholas Waterhouse was a remarkable one. It included many names which are now celebrated, the record of which serves not only as an indication of the position he occupied in the Lancashire trade, but also as a reminder of the growing national importance of the trade. Of the cotton importers who sold through him there were the houses of Rathbone, Hughes & Duncan; Ewart & Rutson, the founder of which firm was godfather to William Ewart Gladstone; and Cropper & Benson, the famous Quaker firm, whose senior partner was later a *bête noire* to Cobbett—the same "canting Jemmy" who was derided by Cobbett because he sought to make "Ireland as happy as England . . . simply by introducing cotton factories, steam-engines, and power looms!"[2] Among the Manchester dealers occurs the name of Robert Spear; and, of manufacturers, there were Richard Arkwright, W. G. and J. Strutt, John and Samuel Horrocks, Robert Peel & Co., and Peel, Yates & Co., though only the first two of these were regular customers. There is even a transaction on behalf of the Chorlton Cotton Twist Co., with which Robert Owen was still associated; and Birley & Hornby of Blackburn, who bought yarn from Robert Owen, bought cotton from Nicholas Waterhouse. The latter employed as his local bankers Messrs. William Clarke & Sons, but the firm became Clarkes & Roscoe at the end of 1799, for the celebrated historian of the Medici emerged from his retirement in the hope of pulling his friend's firm out of danger.

The total import of cotton into Liverpool in 1799 was 86,784 bags, and in that year Mr. Waterhouse handled a business of approximately 25,000 bags. His Profit and Loss account records the number of bags bought or sold on each commission, so that the figures can be stated without doubt. The proportion was extremely handsome, and it was largely due to the fact that he had

[1] Much of the information relating to Nicholas Waterhouse's business has been collected from one of his ledgers, elaborately entered and carefully preserved, covering the years 1799 and 1800. For permission to make use of this interesting source of material, the writer is indebted to Mr. A. Bryce Muir, President of the Liverpool Cotton Association, 1923–24, whose firm is in the direct line of descent from the original firm of Nicholas Waterhouse & Sons.

[2] *Rural Rides*, September 3, 1826.

the patronage, on both sides, of the chief men in the trade. It must be admitted that in half a dozen transactions, for reasons which do not appear, double brokerage was charged; and that sometimes spinners and dealers resold a parcel of cotton. These do not affect, however, the significance of the figures, for an allowance of 500 bags is ample to offset such overlapping operations. Two-thirds of the business was transacted on behalf of importers, on selling commissions; one-third on buying commissions for spinners and Manchester merchants. Not only were spinners such as Arkwright and the Strutts independent of the local dealers, but the maintenance of the quality of their yarn would require that their choice of cotton should be made where there was the largest selection available, and it is easy to see that in their case it would be profitable to employ the specialist buyer. It is possible to support this thesis by reference to the extent of their dealings with the broker. During the year, Arkwright paid brokerage on 1,300 bags valued at £36,000; the Strutts took 1,500 bags costing in all £28,000, and the connection with the two spinners brought more than £300 in commissions to their fortunate agent.

The cotton was received at Liverpool through two main channels—by direct importation on the part of ship-owning merchants, and by consignment to commission merchants and brokers. Importation was the more common at this time,[1] and the four chief selling clients of Nicholas Waterhouse were importers; one of them, the firm of Rathbone, Hughes & Duncan, was engaged in the North American trade, while the other three, the houses of Bolton, Earles, and Kenyon, were in the West Indian trade. Each of these sold through their broker about 2,000 bags in the course of the year, thus between them making up just one-half of this side of his business. The custom of the four represented a turnover of £230,000, and a total amount in brokerages of nearly £1,200.

It would apppear, from a curious fragment of evidence,[2] that

[1] London was the chief centre of the consignment business. In the other ports the majority of the merchants continued to import on their own account. Cf. Westerfield, *Middlemen in English Business*, p. 360. *Liverpool General Advertiser*, October 3, 1799.

[2] "A most respectable gentleman now residing in Devonshire, who has a considerable landed property there, and has also the largest possessions of any in the colony of Demerara, has for these twenty years been intimate with you, and consigned to you the crops of his extensive cotton estates, by which I am well assured you made an annual commission of upwards of £1,000 besides the advantages of freight for your own vessels, etc. This gentleman has now a large family, and as you had made your fortune, and were about to retire from

at first the brokers were prepared to undertake the responsibilities of consignment business without any addition to the normal selling commission. At first sight this seems explanatory of the rapid way in which, over the next twenty years, connections were made by brokers for the assumption of consignment business. It is, however, inconsistent with the persistence of the commission merchant and with the fact that during the same period the responsibility attaching to the receipt of goods on consignment became more onerous. In particular, in the case of cotton, the financing function was assumed, immediate advances being made to American planters against their consignments; indeed without this aid it seems likely that the expanding cultivation of American cotton would have been very much retarded. In turn, the business became limited to those who could employ a relatively large capital. It is improbable that the brokers who undertook additional service and risk would continue to do so for the same remuneration which their weaker competitors could obtain for expert selling alone, and the course of events rendered the separation of functions inevitable. It is interesting to review the probable stages of differentiation. The eighteenth-century commission merchant carried on a more or less miscellaneous trade on behalf of scattered correspondents; under the changing conditions it became possible for the newer functionary to carry on the same duties in a limited field at a much cheaper rate; but the increasing volume of trade enforced specialisation, the distinction of function being recognised in the separation of rewards, although not made absolute by the separation of the agencies concerned.

Historians of the cotton market have paid only cursory attention to the late eighteenth century; the invention of the saw-gin has been regarded as the outstanding landmark; and the formal organisation of the market has been held to date from the early part of the nineteenth century, when the swollen imports of the standardised American cotton began to dominate it. In

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business, he thought he might as well save a few hundreds a year as not by putting his cotton into the hands of the very broker who did your business at Liverpool, and who charged him one-half per cent. only, while your charge was two and a half per cent.

"This gave you great offence; you at once forgot all former favours, and gave orders to the captains of your ships at Demerara to take in on no account a single bale of his cotton, unless consigned to your address; he was therefore totally unprepared with freight vessels, and was very much disappointed and hurt at your unexpected conduct."—*Interesting Letters addressed to John Bolton, Esq., of Liverpool, Merchant, by George Baillie, Esq.* (London, 1809), pp. 36–7.

1799 the West Indies were still the chief source of supply, furnishing in that year one-third of the cotton imports into Liverpool; from the United States came not more than one-fourth, while three years previously American cotton had made only one-sixth of the total. It is not likely, therefore, that up to 1799 the new supplies had exercised any separate influence upon the customs of the market. Under these circumstances there is special point in inquiring further into those customs, thus raising what might otherwise be regarded as inconsequential detail into evidence of rational growth.

Ellison states the various ways in which cotton was sold during the eighteenth century, but he dismisses them as if they were all co-existent, and as if chance alone determined the method of sale.[1] In the first part of the century it appears to have been customary for importers to sell direct to fustian manufacturers. Later, the bulk was sold through general brokers, by auction if the holder wished to realise quickly, otherwise by private sale. At the close of the century the bulk of the import was passing through the hands of the cotton brokers. Both auction and private sale were resorted to, but not in formless or haphazard fashion. The choice lay with the importer, but it is suggested by contemporary newspaper advertisements and by Mr. Waterhouse's ledger, and confirmed later by brokers' circulars, that Friday was the recognised day for holding the "public sales." Earlier in the week came the spinners and the more responsible dealers who had a definite demand to satisfy, while the auction sale attracted a large attendance of dealers, anxious to replenish their stocks by acquiring any lot that offered at an advantageous price.

Again, it can only be inferred from Ellison's account that the reduction in the brokers' commission to one-half per cent. took place about 1810, and the fall is attributed by him to the innovation of "selling on a counter," which was made possible by the extended cultivation and the accompanying care and selection in packing. Previously "the remuneration paid by the importers to the brokers was generally 1 per cent. on the value of the cotton sold, and the dealers and spinners frequently paid $\frac{1}{2}d.$ to $1d.$

[1] "In the infancy of the trade . . . the cotton imported was for the most part sold to dealers. . . . Sometimes it was sold direct to the dealers by private treaty; at other times by auction, either by the importers themselves or by brokers in their employ. Sometimes the dealers themselves attended the auctions, and purchased direct; at other times they commissioned brokers to attend and buy on their account. Occasionally the importers sold direct to spinners. . . . Occasionally, too, spinners purchased through brokers."—*The Cotton Trade of Great Britain*, pp. 165–6.

per lb." [1] Against that view it can simply be said that Nicholas Waterhouse's brokerage was one-half per cent. in every case, whether for buying or selling, and such consistency argues that this had been for some time a recognised charge.

While later developments in the cotton market were certainly due to the attainment of regularity in the cotton offered for sale, the early establishment of the market owed something to the absence of uniformity. When cleanliness and regularity of standard could be taken for granted, emphasis could be laid almost exclusively upon fineness and length of staple; but the conditions under which the first brokers worked required individual and exacting attention in the choice of cotton. Allowances in full were made by importers for cotton returned as being damaged, "seedy," or false-packed.[2] In this there would be a plain convenience to those buying firms who customarily employed a broker. Though the dealer or the spinner might get direct satisfaction from the importer, it would be a tardy business, the more so since claims were commonly made five or six months after delivery of the cotton. The prolonged haggling with a distant importer was avoided when the amount of an admitted claim could be at once credited to the buyer and debited against the seller in the broker's books. Waterhouse's accounts show that it was part of the normal routine to deal with such claims. Allowances for damaged cotton, for "seeds" or "seedy cotton" or "unginned cotton" are to be expected and are the subject of the most frequent entries of this nature. There are, however, more surprising entries—made with due gravity and with meticulous attention to weight, mark, and date of purchase of the original parcel—which reveal considerable fraud in the packing of cotton. Such are those for claims against "stones" ranging from a trivial item of 3½ lb. up to 51½ lb., including in one case "a stone" of 26½ lb. which caused a loss to the importer of £2 16*s*. 10*d*. All the usual devices were resorted to. "Stones and sand" represented a loss of £1 1*s*. 2*d*. on one bag. On one occasion there was 69 lb. of clay; on another the same weight of wood. Elsewhere it was a "lead weight" of 7 lb.; or 17½ lb. of iron allowed for at half a crown a pound; in a worse case it was 106 lb. of what was frankly designated "rubbish." So far as the

[1] *Op. cit.*, p. 166.

[2] The false-packing of cotton was an evil of long standing. An early example is quoted by Weeden, *Economic and Social History of New England*, i. p. 242. "In 1672 John Hull gets two bags of 'vine cotton woole' from the West Indies. He trades them into the country for provisions. The customer finds 'much fowle cotton' in the middle of one bag, and Hull is obliged to make reclamation of his correspondent."

evidence of the ledger goes, it would appear that false-packing was at this time comparatively rare in the consignments from North America. It may be that some significance attaches to this virtue in providing an additional explanation of the partiality displayed for American cotton in spite of the occasional mutilation of the fibre by the saw-gin. But the basis is too slight for the establishment of formal conclusions, and, in any case, the next generation heard bitter and recurring complaint of the false-packing of American cotton.

As yet there was no attempt at the grading of cotton. While this may seem remarkable, since the regular employment of brokers presupposes the adoption of some technical descriptive terms which convey quickly the requirements of the buyer, the reason is not far to seek. Grading was already in use for other West Indian produce: a contemporary Prices Current [1] quotes for "Dabs," "Brown," Middling," "Good," "Fine," and "Very Fine" in the case of sugar, and for "Ordinary," "Middling," "Good," and "Fine" in that of coffee. Later the same system was modified and adapted to cotton. In the meantime, however, such were the differences between the qualities produced in different areas that it was sufficient to quote cotton according to its place of origin, and the same circular names seventeen such varieties.[2] A grading system proper would be necessitated as a uniform type of cotton was introduced and as one or more areas became of paramount importance. Furthermore, the system would be likely to extend, other things being equal, to the type which was most valuable and in which, therefore, differences in quality would be reflected in a wide divergence of price. By 1805, again on the evidence of a broker's circular,[3] Sea Island cotton was graded into "Prime," "Good," "Fair," "Middling," and "Inferior"; this was a time when the lowest price of "Inferior" was 1*s*. 7*d*. and the top price of "Prime" 3*s*. 2*d*. Although the usual terms were employed in the description of particular lots, other types were still denoted in the main by place of origin, and in no case among these was the margin of quotation more than 2*d*. per lb.

As for the financial arrangements between the broker and his buying clients, there is again anticipation of what was to become the prevailing custom. Short credits only were allowed, the majority of payments being made in three-months bills,

[1] Messrs. Ewart & Rutson's Circular, December 4, 1797.

[2] Berbice, Surinam, Cayenne, Porto Rico, Demerara, St. Domingo, Jackmell, Tobago, Barbadoes, Bahamas, Grenada, Guadaloupe, Trinidada, Common West India, Cartagena, Carracca, Guiana.

[3] Mr. Samual Hope's Circular, September 28, 1805.

though sometimes two-months and, on rare occasions, four-months bills were presented; and the settlement was effected within periods ranging from two to fourteen days. Ten years later, in a ledger of 1809, the record of every transaction is marked, "Payment in 10 days per three-months bill," and this was authoritatively stated to be the rule of the trade by Smithers [1] in 1825, and by Baines in 1835.[2]

The year 1799 saw the highest cotton prices of the decade; average prices of West Indian cotton were 33*d.* per lb. in 1798, 37*d.* in 1799, and 29*d.* in 1800. High prices swelled the income in brokerages of Nicholas Waterhouse, and his profit and loss account shows total receipts of £3683 10*s.* Yet price fluctuations in all probability gave him little concern, for new business was steadily coming in. In spite of the fall in prices in 1800 his receipts had mounted to £7781 14*s.* 5*d.*

It was to be expected, however, that the remunerative nature of cotton broking would bring an influx of competitors. Mr. Waterhouse had the special advantage of transacting both buying and selling business; the separation of the two branches, in any case an inevitable development, was hastened by the fact that the new-comers rarely entered without some guarantee of patronage, either from importers or else from spinners. Thus both William Rathbone and John Bolton, who among the importers had been Waterhouse's chief clients, ultimately gave their custom elsewhere because of the closer ties which they had with younger firms. On the other hand, spinners in various localities gave their trade to former spinners or dealers who had foreseen the vigorous development of the port market and had set up in Liverpool as brokers. So William Heaton, a cotton spinner of Blackburn, established himself in Liverpool in 1808; before him had come William Peers, a Stockport spinner whose mill had been burned down; and John Wrigley, unsuccessful as a spinner at Ashton-under-Lyne, began to buy cotton on behalf of neighbouring spinners in 1799, and finally settled in Liverpool.[3] There was yet another channel by which the numbers of the brokers were augmented: the apprentice had a reasonable expectation of becoming himself a principal when his term was completed, and of the apprentices who were trained under Nicholas Waterhouse at least four became eminent figures in the market.[4]

STANLEY DUMBELL

[1] *Liverpool, Its Commerce, Statistics, and Institutions*, p. 140.
[2] *History of the Cotton Manufacture*, p. 319.
[3] Ellison, *op. cit.*, pp. 208, 236, 257.
[4] *Ibid.*, pp. 199–206.

PRICE CONTROL AND THE CORN AVERAGES UNDER THE CORN LAWS

After the late war proposals were entertained for the bonusing of British wheat growers. The proposals involved a reference to individual or regional costs of production, as well as a measure of control over the scale of wages and the standard of farming. After 1815 arable farming was in the same difficulties as it was after 1920. In 1815, however, there was no machinery for arriving at farm costs, and the trend of economic thought was opposed to interference with wages and farming methods. Relief was sought by a rigid policy of fiscal protection. It depended for its operation on reference to the current price of wheat on the home market; and broke down administratively on the lag between policy and prices and the inducement offered to speculators to defeat the policy by manipulation of prices.

After 1800 the setting of the Assize of Bread gradually fell into disuse, but the official prices of corn were still needed for the delicate task of regulating the bounties and duties established by the Corn Laws. Hence in each Corn Law there was a section relating to the returns of prices from the different markets and the determination of the averages on the basis of these. The returns were made by agents of the Government, called Inspectors of Corn, to the Receiver of Corn Returns at headquarters; and we find that, as one Corn Law follows another, the paragraphs relating to their functions increase in bulk with the efforts to secure accuracy and prevent fraud. Up to 1820 the Inspectors outside London were underpaid, receiving only 5*s*. for each return, but with the appointment of William Jacob to the Comptrollership of Corn Returns in 1822, a post which he held for twenty years, many defects of administration were removed.

By the Act of 1791 (31 Geo. III, c. 30), which continued the trend of previous regulations, the returns were taken from those parts of England more immediately accessible to the sea, denominated the Twelve Maritime Districts. These districts were independent of each other, the foreign trade in corn being

governed in each by its own district price, so that the ports might be open in one district and closed in another. Scotland also was divided into four districts; the foreign corn trade of each being governed in the like manner. The inconveniences of provincialism were most clearly exposed in the years immediately following 1770, when England was now an exporting, now an importing country. It used to happen that bounties were given on corn leaving for a foreign country from one district at the very time that foreign corn was being imported into a neighbouring district at the low duty rate. Therefore, in the next general Corn Law (44 Geo. III, c. 109, 1804) a change was made. It was decided to regulate the entire foreign corn trade of England by one internal price, and the aggregate average price of the twelve maritime districts was taken as the basic or regulating price; it was also enacted in the Corn Law of 1804 that the entire trade of Scotland should be governed by the aggregate average of the four Scotch districts.

But the change did not suit Scotland. For when the price of wheat rose sharply in 1805, the rise was not duly reflected in the returns from the remote districts. The general average worked out at 62*s.* 11*d.*, leaving foreign wheat still liable to a prohibitively high duty at a time when wheat stood at 80*s.* in the markets of Glasgow, Paisley and Greenock. Although the manufacturing population was now within sight of famine, it was nevertheless impossible to relieve them by duty-free imports from America. Petitions poured into Parliament. It was prayed that Scotland should come under the English averages, which were always higher, and the prayer was granted (1805). The adoption of a single average for Great Britain removed the last obstacle to the freedom of internal trade. The regulation permitting grain to pass at all times without hindrance from one part of the country to another gave to the inhabitants of the less productive countries a more regular and plentiful supply. It also assisted the producer, assuring, for example, a constant market to the growers of Norfolk barley: which they had not possessed hitherto. As matters had stood in 1804, "the (*sc.* Scottish) ports might be shut against the importation of grain from England by the returns made during the first plentiful year that might occur." [1]

Up to 1806 Ireland was accounted a foreign country in relation to its trade in corn with Great Britain. After 1806,

[1] Committee H. of C., appointed to consider the petitions relating to the Corn Law of 1804 (1805, III.). Evidence of Wm. Macdonald, M.P., p. 15.

when the trade in corn between the two countries was made entirely free, the foreign trade of Ireland was regulated by the English averages. Thus Great Britain and Ireland, which had been a United Kingdom since 1800, arrived at a single ruling price. Henceforth the English averages were the sole object of attention; and on the appearance of agricultural distress in 1820 a Committee [1] sat to inquire into their operation. The general average, they reported, was ascertained thus: "The total quantity of corn sold in each town is cast up, and the total of money for which the same was sold; and then dividing the money by the quarters, the result gives the average price of that town; these average prices of each town being thus found are added together, and being again divided by the number of towns give the average of such district; and the averages of the districts thus found are added together, and being divided by 12, give the aggregate average of the whole twelve districts; and the combined aggregate average price of the six weeks preceding the 15th May, August, November and February determines the opening and shutting of these ports at those periods respectively." [2] But to regulate the course of trade for a whole three months by averages taken from the six weeks preceding the beginning of the period was found to be inadequate for the purpose of the inelastic Corn Law passed in 1815, 55 Geo. 3, c. 26 (free entry to foreign wheat at prices below 80*s.* a quarter, absolute prohibition at prices at or above 80*s.*). A provision was therefore inserted in this law to the effect that "if after the opening of the ports to the importation of foreign corn, etc., the price of any such corn, etc. should in the first six weeks following such opening fall below the prices at which foreign corn is allowed to be imported, the ports shall be shut against the importation of that sort of foreign corn, from any place from the Eyder [Denmark] to the Bidassoa [on the Franco-Spanish boundary]—[*i.e.* from the Near European ports]—for the last six weeks of that quarter, or until a new average shall be made up and published." [3]

The Committee of 1820 found serious defects both in the making of the returns and the calculation of the averages. As the law compelled returns from factors only, these were only

[1] Committee H. of C. on Petitions complaining of agricultural distress, "who were instructed . . . to confine their inquiries to the mode of ascertaining, returning and calculating the average prices of corn, etc." (1820, II.). Report issued July 1820.

[2] Report, p. 8.

[3] Report of 1820, p. 5. This provision was in actual operation between September 1818 and November 1818.

complete in London, where most of the corn was sold on commission, but in the provinces, where it was usual for the growers and importers to sell direct to millers and merchants, the bulk of the sales did not enter into the returns. In Liverpool, especially, the returns were ludicrously inadequate. It was the practice for buyers of corn resident in Manchester, Warrington and other considerable towns to make their purchases in Liverpool, but because they did not live there they were not asked for any returns. Furthermore, Liverpool and district consumed a great deal of Irish corn, which, not being British, was not returnable. The corn, though good of its kind, was inferior to English; and therefore the Liverpool average represented the average not of what was bought and consumed there, but of a high-priced fraction of English-grown corn. In other towns there was just sheer neglect. "It often occurs, particularly in Manchester, Macclesfield and Stockport, that returns are made to the Receiver of 'None Sold.'" In Bristol, "although there are about forty factors and dealers in corn, yet not more than six or seven . . . ever make any returns." [1] Now, if there had been no inducement to falsify the returns it is possible that these random samples would have deviated but little from the true average. But there were such inducements. "Millers and bakers, when concerned in making the return, may have an interest in making the price (particularly in towns where an Assize of Bread is set) appear high. Merchants and factors of foreign corn may have the same inducement to open the ports and warehouses. Farmers have a pride in the quality of their growth of corn as proved by the sale, and often give large measure, or make up deficiency of weight by additional quantity." [2] A notorious case of manipulation was quoted from Liverpool. On a recent occasion returns had been made to the following effect:—"2,300 qrs. of British wheat at 50*s.* per qr.", while the true average of the market had been from 68*s.* to 70*s.* "The parties by whom these returns were made were understood to be considerable holders of British corn, and were induced to resort to this mode of reducing the general averages to promote the purposes of their speculations and to render more improbable the ports being opened for the importation of foreign grain." [3] Inasmuch as each maritime district, like each State in the American Senate, counted equally, regardless of its numerical importance, in the determination of the general average, mani-

[1] Report, p. 6. [2] Report, p. 6.
[3] Committee of 1820. Evidence of John Gladstone, Esq., p. 54.

pulation was most likely to be tried in the sparsest districts; and accordingly the Committee, while urging an all-round increase of vigilance, proposed to remedy this particular defect by lumping together the returns from all the towns, some 150 in all. They hoped for safety in numbers! The Act of 1 & 2 Geo IV, c. 87 (1821), gave effect to this. The total of the prices of each sort of corn, divided by the total of the quantities of each sort, gave the average which was to be published in the *London Gazette*, and which was to "regulate the importation of foreign corn, meal and flour for consumption, and the taking the same out of warehouse for the purpose of being so consumed, until new average prices shall, under 55 Geo. III, or this Act, be made up and notified to the officers of customs."

On the occasion of a temporary Act (7 and 8 Geo. IV, c. 57), passed in July 1827 to permit the entering of warehoused corn for home consumption at certain duties, a further improvement was made (7 and 8 Geo. IV, c. 58). It was an inevitable weakness of the averages that, while used to regulate the future course of trade, they themselves were based on past prices; and this was a serious weakness in a commodity so fluctuating as wheat. The averages might be registering starvation while traders were dealing in plenty. Some check on this had been provided in 1815 for the protection of home growers from Near European shipments by the conditional revision of the averages at the end of six weeks. Otherwise they held for a period of three months. By the 1827 Act the averages were revised weekly on the following ingenious plan. The receiver of corn returns got out the average of each week, added that of the preceding five weeks, and then divided by six to get the aggregate average regulating the payment of duties. The principle is the same as that which was employed in the calculation of tithes. The method was retained in the two subsequent Corn Laws of 1828 and 1842, which embodied one further change. Up to 1828 no returns were taken from the inland districts. They were collected there for statistical purposes but were not used for the corn averages. In the list of 1828, Leicester, Birmingham, Nottingham and Derby occur for the first time. Peel's list of 1842 was obviously intended to include *all* towns of any importance, but not even in this last Act was there any town of Scotland or Ireland.

The story of the averages, although of itself, like the history of Poor Law Settlement, intolerably dull, yet throws sinister half-lights on a policy of agriculture which won applause for

promise more often than for performance. If the repeal of the Corn Laws did nothing else, at any rate it abolished a profession from which the country derived no benefit and which in 1846 was said to be very popular along the coast of Norfolk—the profession of "working the averages." Riggers of the market or rum-runners, bootleggers or workers of the averages, they are all part of the human tribe whose absolution was pronounced in advance in paragraph "thirdly" of Article IV of Part II of chapter II of the Fifth Book of *The Wealth of Nations*.[1]

C. R. FAY

[1] Ed. Cannan, ii, 381.

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THE YIELD AND PRICE OF CORN IN THE MIDDLE AGES

THE great series of the account rolls of the Bishopric of Winchester, extending from 1208 to 1453, suggested to Dr. Hubert Hall and myself some years ago the possibility of constructing a new table of mediæval prices in England longer and more continuous than that of Thorold Rogers. Further examination of the sources has shown this hope to be justified. Delay in the preparation and publication of such a table has been due mainly to the wealth of new material continually unearthed by Dr. Hall and his assistants, and the end is not yet. Meanwhile the Winchester Rolls with which our investigation began can be used to throw light incidentally on another economic problem, that of the productivity of mediæval agriculture as judged both by the yield per acre and by the yield per quarter of seed used. The present paper gives some preliminary results which are subject to revision in detail.

The information used relates to nine out of the fifty or more manors included in the Winchester Rolls. They have been selected geographically—one from each of the counties of Somerset, Wilts, Oxford, Berks, Bucks and Surrey, and three from northern, central and southern Hampshire respectively. Similar information could be obtained for many or most of the other manors of the Bishopric, but it has not seemed worth while to extract it all. One of the manors—Esher in Surrey—proved to be a rye manor, growing little wheat, and for that grain eight manors alone are used. Bearing in mind the types of soil in these manors there seems to be no reason for suspecting that they are exceptional.

At the end of the grange account for each manor the total quantity of grain is given with details of the following items :

grain produced, grain brought forward from a previous year, grain bought during the year. In addition there are in some manors and some periods other entries, such as "church seed," "allowances to servants" at Downton and Witney, "increment of the granary" to about 1318, and charges "*super compotum*" after about 1288. These entries are followed by the acreage and the seed sown for the next year, and occasionally by the rate of seed used per acre. The yield per quarter of seed used and the yield per acre have to be calculated by comparing the produce in one roll with the acreage and the seed in the preceding roll. Dependence on two successive rolls for each year's figures means that there are more gaps in the series of yields than in the series of prices, and that there is occasional risk of putting together produce and seed or acreage which do not relate to the same area. For each of the manors, however, other than Esher, yield figures of wheat are available for from 106 to 143 separate years. Possibilities of error, through the cause named and through other more important causes, though they cannot be eliminated completely, have, it is hoped, been reduced to harmlessness. The main difficulties presented by the records are dealt with in a note at the end of this article.

Generally, it may be said, the figures of yield per quarter of seed are more trustworthy than those of yield per acre. The former, indeed, appear to be better than anything available for any other period in English history, not excluding the most modern times. The amount of grain actually used for seed to-day is not recorded in England, as it is in Australia, and agricultural text-books contain widely varying rules as to how much seed should be applied to each acre. For the comparisons made below, I have used the estimates adopted for statistical purposes by the Ministry of Agriculture of $2\frac{3}{4}$ bushels of wheat per acre, 3 bushels of barley, and $4\frac{3}{4}$ bushels of oats.

It is possible that in another respect also the mediæval figures are better than the modern ones. The produce in the former is the measured amount for which the bailiff accounted; modern figures of produce are based on estimates and, as Mr. J. A. Venn has pointed out, may now err systematically by defect.[1]

The following table gives the location of each of the manors, the number of separate years for which yield figures of wheat can be given, and the areas covered by the returns in the first and the last half-century under review.

[1] Economic Journal, September 1926.

TABLE I

Manors, Acreage and Years Included.

Manor.	County.	Average Acreage covered in Returns.						Years covered for Wheat.
		Wheat.		Barley.		Oats.		
		1200–49	1400–49	1200–49	1400–49	1200–49	1400–49	
Nailsbourne	Somerset	(87)[2]	36	(7)[2]	2	(117)[2]	32	106
Downton	Wilts.	314	53	181	69	234	27	125
Witney	Oxon.	292	40	72	(56)[1]	212	(38)[1]	111
Wargrave	Berks	20	38	20	42	94	13	109
Wycombe	Bucks	156	59	22	33	160	37	116
Ecchinswell	Hants (N.)	90	45	13	18	93	29	140
Overton	Hants (Mid.)	43	41	49	44	182	42	143
Meon	Hants (S.)	371	153	144	45	467	113	137
Esher.	Surrey.	—	—	29	—	94	—	—

[1] 1350–99. [2] 1250–99.

The material for examination is not spread evenly over the whole period. During the first half of the thirteenth century and after 1425 there are more gaps in the series of rolls than during the fourteenth century. Moreover, the acreage to which the returns relate diminishes from the beginning to the end of the period, as more and more of the land is let at a rental or otherwise disposed of in place of being worked directly on the Bishop's account. Thus the total wheat area covered in the eight manors, excluding Esher, begins at about 1400 acres for the first half of the thirteenth century, and falls in successive half-centuries to 885, 682, 559 and 465 acres (in 1400–49). That for barley in nine manors goes from 500 to 253 acres; that for oats from about 1550 to 293 acres. Though some decline of wheat acreage is found in almost every manor, except where the acreage at the beginning was already small, both the rate of decline and the acreage covered vary considerably from one manor to another. It may be added that, taking the manors as a whole, the decline of acreage covered by the returns proceeds steadily. There is no sudden jump at the Black Death or at any other point. In this respect the present inquiry confirms Miss Levett's conclusion that "the estates of the Bishop of Winchester during the fourteenth century show no revolution either in agriculture or in tenure, but changes are effected by a continuous economic evolution." [1] It is perhaps possible to trace in the figures for twenty-five years after the Black Death a slight check in the rate at which the acreage directly farmed for the Bishop declined, but that is all.

[1] *Oxford Studies in Social and Legal History*, Vol. V. p. 142.

The results for the period from 1200 to 1450 as a whole are summarised in Table II, and the mean of the nine manors (eight only for wheat) is compared so far as possible with modern experience, that is to say, with the average for England in the twenty years from 1895 to 1914. The average yield per acre in the seven counties in which the manors lie is slightly but not significantly less than that for England as a whole. The latter has been used here as presumably better for comparison with the Ministry of Agriculture's estimates of seed used.

TABLE II

Yield of Corn in Certain Manors between 1200 *and* 1450.

Manor.	Seed in Quarters used per Acre.			Yield in Quarters per Quarter of Seed.			Yield in Quarters per Acre.		
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
Nailsbourne	0·22	0·37	0·44	4·10	4·45	2·76	0·89	1·66	1·21
Downton .	0·32	0·46	0·50	3·01	3·62	2·52	0·96	1·68	1·27
Witney . .	0·32	0·47	0·61	2·97	3·78	2·18	0·96	1·76	1·33
Wargrave .	0·38	0·49	0·63	3·91	4·13	2·11	1·48	2·04	1·34
Wycombe .	0·35	0·50	0·61	3·33	3·95	2·49	1·16	1·98	1·53
Ecchinswell	0·28	0·45	0·49	4·98	4·27	2·81	1·37	1·94	1·38
Overton .	0·29	0·47	0·55	3·85	3·87	2·52	1·13	1·83	1·38
Meon . .	0·28	0·51	0·55	5·00	3·59	2·71	1·38	1·82	1·50
Esher . .	—	0·49	0·51	—	2·72	1·81	—	1·34	0·92
Mean of all Manors .	0·31	0·47	0·54	3·89	3·82	2·43	1·17	1·79	1·32
England, 1895–1914	0·34	0·38	0·60	11·40	10·99	8·57	3·92	4·12	5·09

The seed used per acre in the Middle Ages is for wheat and oats much the same as, though slightly less than, the modern estimate of the Ministry of Agriculture. For barley it is considerably more; whether this difference is due to a real change of practice, or to the manors not being typical of the whole country, or through error in the Ministry of Agriculture's estimate cannot be said with certainty.

The yield per quarter of seed used is very much less than in modern times. On the average of the eight or nine manors as compared with modern England, the productivity of wheat has gone up from 3·89 quarters of yield for each quarter of seed to 11·40, or nearly three times; the productivity of barley has gone up from 3·82 to 10·99—also just under three times; the productivity of oats has gone up from 2·43 to 8·57, or 3½ times. It may be added that the eleven and a half fold yield of wheat in modern England corresponds to what is achieved in newer

countries like Australia, where the seed is sown much more thinly and the yield per acre is less.[1] A threefold increase in productivity of seed seems to measure broadly the difference between mediæval and modern farming.

The average yield per acre comes out for wheat at 1·17 quarters or 9·36 bushels; for barley, 1·79 quarters or 14·32 bushels, and for oats, 1·32 quarters or 10·56 bushels. The yield in modern times is about $3\frac{1}{3}$ times as great for wheat, $2\frac{1}{3}$ times as great for barley, and $3\frac{3}{4}$ times as great for oats. These figures under-state the advantage of modern times for three reasons. First, the mediæval yields are for the areas actually cultivated. If the acres were reckoned "as they lie," *i.e.* including presumably all the space wasted for various reasons under the open-field system, the acreage would be nearly doubled and the yield per acre approximately halved. The waste in modern cultivation is much less. Second, as has been stated above, there is ground for supposing that modern estimates of yield may habitually tend to be too low. Third, the modern quarter, partly owing to its slightly greater size and partly owing to the higher specific gravity of the grain, contains probably a substantially greater weight of wheat than did the mediæval quarter. According to Steffen the difference is that between 480 and 395 lbs. avoirdupois, *i.e.* an increase of over 21 per cent. It is impossible without much fuller inquiry to make accurate allowance for all these factors, but it seems likely that the weight of wheat got from any given area to-day may be from six to eight times, rather than $3\frac{1}{3}$ times, what it was in the Middle Ages.

The individual manors show considerable differences, ranging for wheat from a threefold to a fivefold yield, and from about 7 to nearly 12 bushels per acre. Meon, Ecchinswell and Nailsbourne have high productivity in relation to seed used for all three crops, except barley at the first-named; Witney, Downton and Wycombe are below or close to the average in every case. In yield per acre Wargrave stands out with Ecchinswell and Meon; while Downton and Witney and the lightly sown Nailsbourne are below the average. These differences appear to be related to the predominating type of soil in the various manors to-day, so far as that can be ascertained.

In the results given above the stretch of two and a half centuries from 1200 to 1450 has been treated as a whole. The next stage in the inquiry is to divide the whole period chrono-

[1] See note at end.

logically, so as to see whether any marked trend either of declining or of increasing productivity of agriculture can be discovered. This is done in Table III, giving for each manor figures similar to those in Table II, in five successive half-centuries.

The material, as stated, is not equally good in all half-centuries. Averages based on less than ten years' figures—as for Witney, Wargrave and Wycombe wheat between 1400 and 1450—are shown in brackets and should be disregarded; the marked fluctuation of yields from one harvest to another makes it unsafe to rely upon a few years only. For this and a number of other reasons already indicated—the different levels of productivity in particular manors, and their unequal and changing representation in the returns—it is difficult to combine their results into any one average figure which shall not be misleading. The figures given at the foot of each section of Table III, being the arithmetic means of the five manors—Nailsbourne, Downton, Ecchinswell, Overton, Meon—which run pretty well throughout the period, are probably open to less objection than most other averages that can be constructed. Looking at these, and disregarding for the moment the doubtful first half-century, two results seem to stand out pretty clearly for wheat:

First, the productivity of seed tends on the whole to rise a little. Second, the productivity of land has no significant movement either of increase or decline.

Barley and oats show increasing productivity of seed a little more markedly than does wheat, and with barley there seems to be an increase also in the productivity of land.

The second of the facts noted above for wheat is perhaps the most striking result of the whole inquiry. Broadly, over the whole range of 250 years from the beginning of the thirteenth to the middle of the fifteenth century, the productivity of the soil under wheat shows no general change of level.[1] In one particular manor—Ecchinswell—there seems to be an upward tendency; in another—Meon—there seems to be a downward tendency. The general impression is one of stability and stagnation. There is little sign either of material advance in agricultural methods or of that declining fertility of the soil which some writers have discovered in the later Middle Ages.

[1] This statement brings in the first half-century for which no satisfactory mean figure can be given for comparison with the other half-centuries. From 1200–49 to 1250–99 four of the manors show a decline and three an increase of yield per acre. Looking at all three crops the hundred years from 1250 to 1349 appear as a period of markedly low productivity of seed, a fact which may perhaps be evidence of exceptional climatic stress.

TABLE III

Use of Seed and Yield of Corn in Nine Winchester Manors from 1200 *to* 1449.

	WHEAT.						BARLEY.						OATS.					
	1200–49	1250–99	1300–49	1350–99	1400–49	1200–1449	1200–49	1250–99	1300–49	1350–99	1400–49	1200–1449	1200–49	1250–99	1300–49	1350–99	1400–49	1200–1449
A. Quarters of seed used per acre.																		
1. Nailsbourne* .	—	0·24	0·23	0·19	0·19	0·22	—	0·30	0·42	0·38	0·41	0·37	—	0·48	0·46	0·38	0·38	0·44
2. Downton* . .	0·33	0·31	0·32	0·31	0·31	0·32	0·46	0·40	0·50	0·50	0·50	0·46	0·52	0·50	0·50	0·50	0·50	0·50
3. Witney . .	0·26	0·37	0·33	0·30	[0·29]	0·32	0·36	0·49	0·45	0·50	—	0·47	0·60	0·72	0·54	0·51	—	0·61
4. Wargrave .	[0·36]	0·37	0·38	0·38	[0·37]	0·38	[0·48]	0·48	0·50	0·50	[0·50]	0·49	[0·65]	0·66	0·62	0·62	[0·58]	0·63
5. Wycombe . .	0·38	0·37	0·34	0·31	[0·31]	0·35	0·49	0·50	0·50	0·50	[0·50]	0·50	0·61	0·75	0·58	0·50	[0·50]	0·61
6. Ecchinswell* .	0·22	0·26	0·28	0·30	0·28	0·28	0·40	0·40	0·44	0·47	0·50	0·45	0·44	0·50	0·50	0·50	0·49	0·49
7. Overton* . .	0·31	0·32	0·28	0·30	0·26	0·29	0·40	0·49	0·44	0·49	0·50	0·47	0·54	0·63	0·51	0·50	0·50	0·55
8. Meon* . . .	0·23	0·38	0·29	0·25	0·25	0·28	0·36	0·69	0·51	0·50	0·50	0·51	0·50	0·67	0·53	0·50	0·50	0·55
9. Esher . . .							0·48	0·50	0·49	0·50	—	0·49	0·50	0·50	0·51	0·51	—	0·51
* Mean of five Manors	(0·26)	0·30	0·28	0·27	0·26	0·28	(0·38)	0·46	0·46	0·47	0·48	0·45	(0·49)	0·56	0·50	0·48	0·47	0·51
B. Quarters of produce per quarter of seed.																		
1. Nailsbourne* .	—	3·07	4·33	4·58	4·31	4·10	—	3·55	4·86	4·67	4·10	4·45	—	2·35	2·82	2·95	3·49	2·76
2. Downton* . .	2·73	2·48	3·43	3·41	3·29	3·01	4·53	2·55	3·90	3·83	3·94	3·62	2·87	1·97	2·64	2·74	3·10	2·52
3. Witney . .	2·94	2·80	3·01	3·27	[2·63]	2·97	4·40	3·86	4·25	3·32	—	3·78	2·29	2·19	2·06	2·31	—	2·18
4. Wargrave . .	[5·81]	3·98	4·06	3·72	[3·28]	3·91	[5·63]	3·77	4·22	4·11	[3·36]	4·13	[2·96]	1·95	1·71	2·34	[3·04]	2·11
5. Wycombe . .	3·74	2·91	3·04	3·78	[2·51]	3·33	4·69	3·53	2·94	4·20	[4·06]	3·95	3·23	2·17	2·13	2·88	[2·65]	2·49
6. Ecchinswell* .	5·67	4·50	4·46	4·90	6·10	4·98	4·45	4·10	3·54	4·22	5·00	4·27	3·12	2·32	2·25	3·01	4·33	2·81
7. Overton* . .	3·69	4·24	3·66	3·55	4·33	3·85	4·15	3·59	3·24	3·93	4·61	3·87	2·57	2·47	2·07	2·80	3·38	2·52
8. Meon* . . .	5·19	4·44	5·26	5·25	4·66	5·00	3·89	3·56	3·47	3·42	3·89	3·59	3·05	2·53	2·43	2·86	3·63	2·71
9. Esher . . .							3·12	2·78	2·72	2·42	—	2·72	1·65	1·74	1·88	1·80	—	1·81
* Mean of five Manors	(4·14)	3·75	4·23	4·34	4·54	4·19	(4·28)	3·47	3·80	4·01	4·31	3·96	(2·92)	2·33	2·44	2·87	3·59	2·66
C. Quarters of produce per acre.																		
1. Nailsbourne* .	—	0·75	0·98	0·87	0·81	0·89	—	1·07	2·02	1·77	1·68	1·66	—	1·13	1·30	1·11	1·31	1·21
2. Downton* . .	0·90	0·77	1·10	1·07	1·02	0·96	2·07	1·02	1·96	1·91	1·97	1·68	1·48	0·99	1·31	1·38	1·55	1·27
3. Witney . .	0·77	1·04	0·98	0·97	[0·76]	0·96	1·58	1·91	1·92	1·66	—	1·76	1·37	1·57	1·12	1·17	—	1·33
4. Wargrave . .	[2·09]	1·49	1·53	1·42	[1·21]	1·48	[2·71]	1·81	2·12	2·04	[1·68]	2·04	[1·92]	1·29	1·06	1·46	[1·75]	1·34
5. Wycombe . .	1·41	1·09	1·04	1·18	[0·79]	1·16	2·30	1·76	1·46	2·11	[2·03]	1·98	1·97	1·62	1·23	1·44	[1·33]	1·53
6. Ecchinswell* .	1·23	1·18	1·24	1·49	1·69	1·37	1·75	1·64	1·56	1·98	2·49	1·94	1·37	1·17	1·12	1·52	2·14	1·38
7. Overton* . .	1·15	1·34	1·04	1·08	1·13	1·13	1·65	1·75	1·43	1·92	2·29	1·83	1·38	1·55	1·06	1·40	1·69	1·38
8. Meon* . . .	1·17	1·67	1·52	1·33	1·16	1·38	1·40	2·46	1·78	1·72	1·94	1·82	1·53	1·70	1·28	1·44	1·81	1·50
9 Esher . . .							1·50	1·38	1·32	1·21	—	1·34	0·83	0·87	0·96	0·92	—	0·92
* Mean of five Manors	(1·02)	1·14	1·18	1·17	1·16	1·15	(1·59)	1·59	1·75	1·86	2·07	1·79	(1·40)	1·31	1·21	1·37	1·70	1·35

The result suggests inquiry as to when and how the three-fold increase in the productivity of seed between mediæval and modern times took place. The material for answering that question, not on generalisations as to yield at various dates by agricultural writers, but from actual farming records, has not yet been discovered and is probably not to any large extent in existence. Some farming records scattered through the centuries between the fifteenth and the nineteenth there must be, and search for them might be repaid. The difficulty would be to get enough of them to be sure that they presented a fair picture; since the Winchester Rolls ended, the farmer who kept accounts has not been typical. Two seventeenth-century accounts examined for me by Dr. Hall yield interesting but discrepant results. One account,[1] kindly communicated by Captain Loder Symonds, R.N., gives for the nine years 1612 to 1620 a yield of 11·83 quarters of wheat and 7·14 quarters of barley for each quarter of seed used; in the best year the wheat yield was more than twenty-fold. These results clearly represent exceptionally good farming; wheat is just above the modern figure. Another account, apparently for newly enclosed woodlands at Peckham, covers three or four years only between 1639 and 1651. The yield of wheat per quarter of seed ranges from 3·90 quarters to 5·55, and per acre from 1·46 quarters to 1·83; the advance on mediæval times is much less.

All the figures given above are averages taking in many years together. They are based on separate figures for single years which it is proposed to publish later. Meanwhile it may be stated that the yearly figures show, as might be expected, a marked variation of yield according to harvest conditions, and that their movement shows a strong negative correlation with the movement of prices. Analysis of the yearly figures should yield interesting comparisons as to the range of variation from good to bad harvests in mediæval and modern times respectively.

The present article is concerned primarily with the yield of corn. Detailed examination of prices would not be worth while in view of the fuller information now in course of preparation. Certain figures, however, may be worth giving, even at this stage, and are set out in Tables IV and V.

The first of these tables shows, for successive half-centuries from 1200 to 1450, the average prices of grain, live-stock, wool and salt as derived from the records of the nine Winchester Manors and from Thorold Rogers. The second table represents some of the same prices as index-numbers on the basis: Mean

[1] For Wargrave in Berkshire,

of 1300–49 = 100; in this table the Winchester Manor prices (W) are given in roman type and Rogers' prices (R) are given just below in italics. Wool and live-stock other than oxen and sheep are omitted from this table, as the material is less satisfactory than for the articles. On the other hand, there is added an index-number based on Rogers' figures for a number of articles not of an agricultural character.[1] Table V presents several suggestive results which may be briefly indicated.

TABLE IV

Prices of Commodities 1200 *to* 1450 (*in shillings*).

Commodity.	Unit.	1200–49.	1250–99.	1300–49.	1350–99.	1400–49.	1200–1449.[6]
Nine Winchester Manors.							
Wheat	Qr.	4·01	5·52	6·33	6·89	6·34	6·05
Barley	,,	2·66	3·88	4·48	4·59	3·74	4·05
Rye	,,	3·68	4·68	5·29	5·34	—	4·87
Oats	,,	1·60	2·35	2·63	2·72	2·05	2·36
Salt	,,	1·87	2·60	3·62	6·05	4·68	4·11
Wool (Great) [1]	Clove	1·42	1·86	2·31	1·85	2·04	1·92
,, (Lambs) [2]	,,	1·10	1·55	1·99	1·38	1·20	1·43
Oxen	Each	7·97	10·46	13·30	14·92	14·19	12·76
Cows	,,	7·05	8·55	9·18	10·40	9·02	9·24
Sheep (Muttons)	,,	1·15	1·33	1·32	1·79	1·71	1·53
Ewes	,,	1·04	1·13	1·21	1·49	1·35	1·28
Hoggasters	,,	0·64	1·01	1·24	1·47	1·37	1·28
Lambs	,,	0·28	0·58	0·70	0·90	0·93	0·81
Rams	,,	—	1·27	1·64	1·83	2·08	1·75
Rogers' General Averages.							
Wheat	Qr.		5·35	6·01	6·13	5·77	5·83
Barley	,,		3·91	4·25	4·08	3·67	3·97
Rye	,,		4·39	4·60	4·24	4·07	4·32
Oats	,,		2·19	2·48	2·61	2·17	2·37
Salt	,,		2·77	3·87	6·40	4·82	4·55
Wool [3]	Clove		2·14	2·14	2·11	1·77	2·03
Oxen	Each		10·75	13·05	14·87	18·45 [4]	14·44 [4]
Cows [5]	,,		7·43	9·94	10·62	—	9·55
Sheep (Muttons)	,,		1·68	1·92	2·06	2·11	1·97

[1] Rarely more than one entry in a year after 1325.
[2] Before 1375 very few entries each year.
[3] Great wool to 1401, mixed thereafter.
[4] 1400–49—"Highest price."
[5] "Highest prices of." This is the only set which runs through the two volumes of Rogers.
[6] Rogers figures are for 1259–1449.

First, there is a satisfactory general agreement between Rogers' figures and mine, though the material used is entirely different. The mean of the former as given at the foot of the

[1] Lime, laths, plain tiles, wrought iron, canvas, cloth, board nails, lath nails, shirting, candles, slates, charcoal, paper (the last five only after 1400, the first eight throughout the period 1260–1450).

table runs 87, 100, 112, 99, and that of the latter 86, 100, 119, 104; the last figures in each list would be closer together if it had not been necessary to omit rye from my figures and oxen from Rogers'. The correspondence is closest where the material is best—as for wheat, barley, oats, oxen and salt. The most striking case is that of salt, where the abnormal rise in the half-century after the Black Death and the decline thereafter are recorded in all but identical figures.

Second, there is a rapid rise of prices between the first two periods taken, that is to say, from the first half to the second half of the thirteenth century. This is only the slackening end of a movement which other figures show beginning about the middle of the twelfth century and which, when fully examined, may prove to have been one of the most violent price revolutions in English history, comparable in speed to the revolution of the sixteenth century, though not having equal social and economic consequences.[1] The mean figures show a further increase at a slower rate from the second to the third and from the third to the fourth of the periods taken, and a decline to the last (1400 to 1449). But whereas the movements up to 1300–49 are much the same for all the articles, those after it are divergent. The use of the mean is dangerous; still more is the use of the price of any one article as a guide to the general purchasing power of money.

This is the third and most important point to be made. Comparisons of money wages with the price of wheat have led to the building up of a theory of a " golden age " for the labourer in the fifteenth century, between the rapid rise of wages following the Black Death and the rise of prices following the discovery of America. A well-known and impressive chart in Steffen's *Studien zur Geschichte der Englischen Lohnarbeiter*[2] shows the labourer's daily wage in terms of wheat rising swiftly from the first half of the fourteenth century, and between 1450 and 1500 ranging at heights never approached again till the last quarter of the nineteenth century. Steffen's chart, coupled with the evidence now adduced as to the unchanged productivity of agriculture at least up to 1450, might even be taken as a great historic illustration of Malthusian truths. Might it not appear as if, after the Black Death had beneficently halved the population, the standard of real wages, though there was no increase

[1] Preliminary results suggest that the prices of wheat and live-stock of all kinds doubled or trebled in fifty years from the third quarter of the twelfth to the first quarter of the thirteenth century.

[2] Vol. I. p. 112 of the German edition of 1901.

of technical skill, rose rapidly, that there were then two or three happy generations, but that, alas! they generated too freely, so that, even before the great rise of prices in the sixteenth century, real wages began to fall headlong till they reached starvation level about 1600, and stayed at or little above it till about 1830.

TABLE V

Index Numbers of Prices, 1200 to 1450.

(Mean of 1300–49 = 100.)

		1200–49.	1250–99.	1300–49.	1350–99.	1400–49.
Wheat	W	63	87	100	109	100
	R	—	*89*	*100*	*102*	*96*
Barley	W	59	87	100	102	83
	R	—	*92*	*100*	*96*	*86*
Oats	W	61	89	100	103	78
	R	—	*88*	*100*	*105*	*87*
Rye	W	70	88	100	101	—
	R	—	*95*	*100*	*92*	*88*
Oxen	W	60	79	100	112	107
	R	—	*82*	*100*	*114*	—
Sheep	W	87	101	100	136	130
	R	—	*88*	*100*	*107*	*110*
Salt	W	52	72	100	167	129
	R	—	*72*	*100*	*165*	*125*
Mean of above articles	W	65	86	100	119	104
	R	—	*87*	*100*	*112*	*99*
Other articles	R	—	*84*	*100*	*177*	*174*

W = Mean of nine Winchester Manors; R = Rogers.
For sheep, Rogers' prices are the "highest prices."

Serious examination of this or other theories of the "golden age" is beyond the scope of this article, and must wait on fuller information. All that can be done here is to call attention to the discrepant movements of the prices of different articles in the later part of Table V, that is to say after the Black Death. Wheat, on the average of half-centuries, remains near the general level of 1300–49; the other grains—barley, oats and rye—show a decline; wool also, though the figures need further examination, almost certainly shows a decline. On the other hand, salt and live-stock of all kinds (except cows) are more costly in the first half of the fifteenth than in the first half of the fourteenth century. So, most markedly, are the non-agricultural articles from Rogers' work included in the last row of Table V. How closely the prices for these articles at different times are comparable with one another, *i.e.* how far they represent equivalent

articles, it is impossible without further investigation to say. But the rise of 77 per cent. shown from the first half to the second half of the fourteenth century is so great that it can hardly be unreal.

With figures such as these, the movements of any general index-number of prices will depend very much upon the weights assigned to different articles. The construction of such an index-number must wait till more and better material has been made available, and the actual turning-points in price movements need to be examined more closely than by half-centuries. The present figures of price are put forward to serve mainly a negative and warning purpose.

W. H. Beveridge.

NOTES ON MATERIAL AND TABLES

Apart from the causes of occasional error noted later, the two main difficulties in interpreting the material arise from (*a*) variations in the mode of reckoning the acreage and (*b*) the entries of charges "*super compotum*."

Acres in the accounts are reckoned either "by the perch," representing apparently a true measurement of the land actually cultivated, or "as they lie," representing apparently an estimate in which might be included all the land wasted as balks, grass patches, field roads and the like under the open-field system. In two of the manors (Wargrave and Wycombe) the acres are expressly given by the perch throughout, and in two others (Downton and Esher) they clearly are so reckoned throughout though it is not always expressly stated. In Nailsbourne the reckoning, though never expressly defined, is obviously on the same basis throughout, and has been taken as a measurement by the perch; it is possible but not likely that this is wrong and that the error accounts for the low seed and yield per acre. In the other four manors the method of reckoning varies, being sometimes "by the perch" and sometimes "as they lie." Fortunately the giving of the seed used makes it possible to control this, and by a very simple calculation to get back in practically every case with reasonable accuracy to the true acreage. The seed used for any given area does not vary rapidly from one year to the next. The reckoning of acres "as they lie" is practically confined to years between 1283 and 1318 and to the three Hampshire manors and Witney. For Ecchinswell from 1283 to 1318, Overton 1302 to 1318, Meon 1302 to 1318 and Witney 1306 to 1318, the nominal acreage "as they lie" has been re-calculated by reference to the seed used.[1]

The entries of charges "*super compotum*" relate to an interesting procedure, under which the Bishops' auditors apparently fixed the rate of yield to be expected; the difference between the produce at that rate and the actual produce is entered, *plus* or *minus*, as something with which the bailiff is charged at the end of his account. The difference between the rated and the actual produce, whether *plus* or *minus*, is not as a rule great, and the latter has normally

[1] For some other years, *e.g.* Witney 1299 to 1305, 1367 to 1388, and Overton 1291 to 1301, the acres are given "as they lie," or "as they lie in the fields," but the seed figures show that the calculation was substantially by the perch. It may be added that in most cases the correction has amounted roughly to halving the acres "as they lie," though for wheat and oats at Meon the reduction is greater—to one-third. Halving corresponds well with an actual figure in a rental of 1458 found by Dr. Hall, where the same area is 32 acres "by the perch" and 61 acres "as they lie."

been used here as representing the achieved rather than the estimated results. Occasionally, however, the actual produce is much below the rated produce, and gives an impossible yield figure. In such cases it is clear that part of the actual produce must have been brought into account for special reasons (*e.g.* late returns or damage to crop by trespass), after the account was closed; the rated produce has been taken accordingly. The rates of yield set by the auditors furnish an interesting supplement to the other figures. They suggest, for instance, that the apparent increase in the productivity of Ecchinswell towards the end of the period was real and does not arise through error in the figures; the rates set, so far as they have been extracted, are definitely higher between 1400 and 1450 than before.

In addition the following minor difficulties occur:

1. Grain remaining from a previous year does not often occur, and if it does is noted, so that it does not enter into the produce of the current year. But in some cases at least it may have been brought in after the previous year's account was made up, and so may have been excluded wrongly from that year's produce.

2. The sowing of more than one variety of the same grain, *e.g.* winter and palm barley, or lesser and great oats, in the same manor in the same year sometimes causes uncertainty.

3. "Increment of the granary" is always about one-eighth of the other produce. Apparently heaped bushels went into the granary, and this is the difference between the heaped and the rased bushel. Such entries have been included throughout.

4. "Church seed," not being produce, has been excluded throughout.

5. Acreage sown for servants' allowances appears in the Downton and Witney accounts in certain periods. It has been excluded throughout, as the produce is entered always at an arbitrary low rate.

Generally the points mentioned above, while they have given much trouble in the preparation of the statistics and while they make it impossible absolutely to rely on the figures for each individual year, are not such as to throw doubt on the substantial accuracy of the main results.

The seed per acre in each manor both for the whole period and for the successive half-centuries has been got not as an average of annual figures, but by dividing total seed by total acreage, omitting years in which acres are reckoned "as they lie."

The yield per seed in each manor is got by dividing total produce by total seed, for all years.

The yield per acre in each manor is got by dividing total produce by total acreage, for all years (acres "as they lie" being reduced to correct acres by reference to the seed used in the years of correct acreage in the same period).

The means are the arithmetic means of eight or nine manors (Table II) or five manors (Table III). For 1200–49 the mean of the five manors has been deduced from that for 1250–99 in the ratio of the means including and excluding Nailsbourne; it is shown in brackets in Table III.

The following notes apply to Table III.

Downton (for wheat 1306–1449) and Witney (for wheat 1325–1449) have been corrected by omitting acreage sown for servants.

Witney (for wheat and oats 1300–49), Ecchinswell (for all grains 1250–1349), Overton and Meon (for all grains 1300–49) have been corrected in "A. Quarters of Seed used per Acre" by excluding the years in which acres are reckoned "as they lie," and in "C. Quarters of Produce per Acre" by deducing acreage for these years from seed used.

The bracketed figures for certain manors in certain periods are averages for less than ten years.

In Australia the seed used per acre in the decade 1905–14 averaged ·938 bushels and the produce 10·22 bushels, an eleven-fold yield. For 1915–24 the productivity is nearly fourteen-fold, with seed ·921 bushels and produce 12·79 bushels per acre.

AN EARLY EXPOSITION OF "FINAL UTILITY."

W. F. Lloyd's Lecture on "The Notion of Value" (1833) Reprinted

William Forster Lloyd was the third son of Thomas Lloyd, Rector of Aston-sub-Edge, Gloucestershire, but a resident of Great Missenden, and a schoolmaster there of considerable reputation. The eldest brother died at Eton. The second brother was Dr. Charles Lloyd, Regius Professor of Divinity and, at the same time, Bishop of Oxford, a pioneer of the Oxford Movement, Peel's tutor at Christ Church, and later his constant correspondent on various subjects. They agreed in endorsing Ricardian doctrine at the time of the Resumption of Cash Payments Committee (1819). It is not known whether the divine consulted his economist brother on what to say to Peel. They were both living in Christ Church at the time.

W. F. Lloyd was born in 1795, entered Westminster School as a scholar in 1807, was captain of Westminster in 1811, was elected to Christ Church in 1812, became mathematical lecturer at Christ Church 1816–1824 and Reader in Greek in 1823. In 1832 he was appointed to the Drummond Professorship of Political Economy in the University of Oxford in succession to Whately (who followed Nassau Senior), a position which he held, as was normal then, for five years. In 1834 he was elected a Fellow of the Royal Society.

In 1830 he published "*Prices of corn in Oxford in the beginning of the fourteenth century: also from the year* 1583 *to the present time,*" which recalls the greater work of Thorold Rogers, who later held the same chair. As Professor, Lloyd published one lecture a year in compliance with the statute. In the second lecture thus printed, on "The Notion of Value," Lloyd anticipated the Jevonian concept of final utility. While Jevons gave it to the world with some blare of trumpets and intimations of a Copernican revolution, Lloyd felt impelled to plead the statutory requirement as an excuse for publication. Learning has suffered from Lloyd's modesty.

These professorial lectures were collected in 1837 and published under the title, *Lectures on Population, Value, Poor-Laws, and Rent*, by Roake and Varty, of London, and Parker, of Oxford.

His stock seems to have been a weak one. The eldest brother died at 18, the bishop at 45, and he himself went into absolute retirement at 42, on the termination of his professorship. His mind was keen and luminous; but his ambition was evidently in harmony with his physique. His intellect triumphed in its own battlefield, but it did not triumph over his body; there was no struggle against waning powers; there was no desire for achievement. He lived for fifteen years in obscurity at Great Missenden and died at the age of 57.

Since the lecture on "The Notion of Value" is of great rarity, it has been thought worth while to reprint it below. Attention was first drawn to the interest of this document by Professor Seligman in the ECONOMIC JOURNAL of September 1903, and the proposal that the Royal Economic Society should reprint it is due to Lloyd's successor in the Drummond Chair, the late Professor Edgeworth. R. F. HARROD

A LECTURE

on

THE NOTION OF VALUE,

as

Distinguishable Not Only From Utility,

but also from

VALUE IN EXCHANGE

Delivered before the University of Oxford,

In Michaelmas Term 1833,

By the

REV. W. F. LLOYD, M.A., F.R.S.

Student of Christ Church, Professor of Political Economy.

ADVERTISEMENT

It is provided in the Statute by which the Professorship is founded, that one Lecture in each course shall be annually published. In compliance with this provision, the following Lecture, delivered in Michaelmas term, 1833, is submitted to the public. The author thinks it necessary to state this, to account for the abruptness of the beginning, which has reference to a former Lecture of the course.

LECTURE, etc.

In my last lecture, I treated, in the first place, of the subject of utility, and afterwards proceeded to consider the sense in which Adam Smith applied the term value, while inquiring respecting the real measure of exchangeable value. I then endeavoured to show, that he could not generally mean by it the power of purchasing other goods which the possession of any object conveys —a meaning, which involves necessarily a comparison, and therefore a relation, of different objects, while the context seemed to refer to something positive and absolute—to something, which could be understood as belonging to a single object, taken by itself and without reference to other subjects. From an examination of some particular passages, I collected that, in those passages at least, he was using the term in the sense of the real importance of an object to the person possessing it, and that he made this importance to depend on the difficulty of attainment. I now proceed to the further consideration of this view of the subject.[1]

A question has been sometimes agitated respecting the possibility of a general glut of commodities, or, in other words, of universal over-production. A glut of commodities of any one species is on all hands admitted to be not only a possible but frequent occurrence. So likewise, but in a decreasing degree of probability and frequency, of two, three, four, or more species. All, therefore, that is denied is the probability of its extending at once to the majority of commodities, and the possibility of its being universal. I mention this question, not with the view of entering on the full consideration of it at present, but only because it will be useful to my purpose to draw attention to some of the arguments advanced by those who maintain the negative side. A general glut of commodities is, they say, the same thing as a general superabundance of wealth, and would indicate the full satisfaction of all human wants; but that there is, in fact, no assignable limit to the desires of mankind; for when one inconvenience is removed, others present themselves, which before had never been thought of; and thus the passion for wealth expands with the gratification of existing wants, and, if not absolutely infinite, may at least be termed indefinite; being capable of extending itself far beyond any bounds, to which the most enthusiastic imagination can believe that the power of human production will ever reach.

Now, though it may be reasonably urged, that these argu-

[1] *Wealth of Nations*, Book I, Ch. 8, *init.*

ments do not bear immediately upon the main question respecting a glut of commodities, which is concerned rather with the remuneration of the producers than with the disposition to consumption, yet no one can doubt the general truth of the propositions themselves. Nobody, for example, can maintain that, were the aggregate incomes of all persons in this country to be increased tenfold, they would find any difficulty in disposing of them.

> Nec Croesi fortuna unquam nec Persica regna
> Sufficient animo—(Juvenal)

is an apt quotation which I have met with in relation to this subject, and contains a truth acknowledged by philosophy and confirmed by the experience of mankind.

But whether these arguments be applicable or not to the question of a glut, they would not, I think, be even true in themselves, if the objects which can gratify human wants were limited in the number of their kinds. It is only the multiplication of the kinds of wants which renders the passion for wealth unlimited. The wants of savages, for example, are confined to a few of the most necessary articles, such as food and clothing, and even of these they have not a sufficiency. Supposing, however, for a moment, that the catalogue of their wants could remain invariable, it is not difficult to conceive the means, by which their existing wants might be fully gratified. They might be fed to satiety, and clothed to satiety, and thus, (all new wants being excluded by the hypothesis,) the final sum of their wealth would be reached, and all further production would be useless.

The same would be true of more civilized societies, were their wants in like manner limited to any determinate number. If no books of any other description had ever been wanted than such as existed at the time when printing was invented, this art might soon have multiplied copies to a degree fully adequate to the supply of all. The same is true of every other particular commodity; and thus, it is the infinite variety of wants, and of the kinds of commodities necessary to their gratification, which alone renders the passion for wealth indefinite and insatiable. In the case of each *species infima*, as logicians call it, the desire is limited.

It is now time to point out in what manner these observations bear upon the question which is directly before us. We have come to the conclusion, that an increase of quantity will at length exhaust, or satisfy to the utmost, the demand for any specific object of desire. Having reached this point, let us now inquire, what happens, with respect to value, at the time when the demand

or want is thus fully satisfied? It will be found that, in the case of every commodity, its value vanishes at the very instant of satisfaction. Take, for example, water. Water is valueless, or nearly so, except under some special circumstances, by reason of its abundance. Every person has at his command more than is sufficient for every purpose to which he can wish to apply it. He has, therefore, no reason for being sparing in its use. If any remains after satisfying the present occasion, he has no cause for hoarding it, or for making a property of it, or debarring others from the use of it. I mention these particulars, because, where they are present, they are sure indications of value, and, according to their intensity, so is the intensity of the value. We are sparing in the use of a valuable object, because we can thus make it last the longer, and we wish to make it last the longer because, when spent and consumed, it cannot easily be replaced. We hoard it, we appropriate it, we debar others from the use of it, for the same reason. In the reasons, therefore, which exist for preserving and for retaining the possession of an object, its value essentially consists. It has with great propriety been defined to mean the esteem in which an object is held. But to make the definition complete and easily intelligible, some further explanation may perhaps be necessary.

Let us suppose the case of an hungry man having one ounce, and only one ounce of food at his command. To him, this ounce is obviously of very great importance. Suppose him now to have two ounces. These are still of great importance; but the importance of the second is not equal to that of the single ounce. In other words, he would not suffer so much from parting with one of his two ounces, retaining one for himself, as he would suffer, when he had only one ounce, by parting with that one, and so retaining none. The importance of a third ounce is still less than that of the second; so likewise of a fourth, until at length, in the continual increase of the number of ounces, we come to a point, when, "through that infallible specific, eating," the appetite is entirely or nearly lost, and when, with respect to a single ounce, it is a matter of indifference whether it is parted with or retained. Thus while he is scantily supplied with food, he holds a given portion of it in great esteem—in other words, he sets a great value on it; when his supply is increased, his esteem for a given quantity is lessened, or, in other words, he sets a less value on it.

Hence the appetite for food may be compared to a spring, a watch-spring for example, which, when fully compressed, or wound up, has the greatest tendency to expansion. By degrees,

as it becomes more and more actually expanded, its tendency to fly out is diminished, until at length it ceases altogether.

The case is the same with respect to all other commodities. There may be a certain amount of convenience in having a time-piece in every room of a house; still the convenience of the first, that is, the importance of having *one*, is probably greater than that of all the rest put together. So, a person who has one house may wish to have a second, but still the want of the second is not equal to that of the first.

Each different kind, therefore, of human wants may, like that of food, be compared to a spring; and, in this comparison, the different wants, according to their several differences, will be represented by springs of different degrees of strength. For example, the wants which food can satisfy will be represented by a spring of great power. So also those to supply which water is required. For representing the wants of clothing and fuel, which are articles not so indispensably necessary to human existence, springs of an inferior degree of power may suffice. Passing on to the artificial wants, we may represent them according to their intensities, by lesser springs of various degrees of strength.

Let us enter a little more minutely into this comparison. We can imagine a spring of such strength that a weight of many tons shall be required in order that its elasticity may be fully and entirely confined. Yet when some play has been allowed to it, a less force shall be sufficient to retain it in its new position. And as it approaches the limit of its power of expansion, the force even of the hair-spring of a watch shall be sufficient to keep it in its place. There are, therefore, two ways in which the same two springs may be compared. We may compare them absolutely, as when we say that the main-spring of a watch is stronger than the hair-spring; or, on the other hand, we may compare their expansive forces under some stated modification of their actual conditions; as, in the instance of a watch which is nearly down and on the point of stopping,[1] we may say that the main-spring has scarcely more strength, that is, in its actual state of expansion, has scarcely any greater tendency to expand itself further than the hair-spring has, when it is most contracted.

I direct your attention to these two modes of comparing the same two springs, because I think they may serve to illustrate the difference between utility and value. We estimate the utilities

[1] I here suppose the watch to stop because the spring is exhausted, not because the chain is come to an end. And this would be the case practically if the chain were made long enough.

of objects by the importance of the wants they are capable of supplying, considered absolutely; in the same manner as when we say that the main-spring of a watch is stronger than the hair-spring. As the main-spring remains equally strong whether the watch be wound up or unwound, so a difference in the degree in which any want is supplied makes no difference in the utility of the object which can supply it. Water is no more useful in a ship at sea, where it is scarce, than on land, where it is plentiful. The utility of corn is the same after an abundant harvest as in time of famine.

But the wants, on which value depends, are analogous to the tendencies of springs, which are already in part extended, to extend themselves further. They vary with every variation in the quantity of commodities, and in the consequent variation of the degree in which the absolute want is satisfied, as the expansive tendency of a spring varies with every variation of the degree of its actual expansion. According to this mode of considering the force of a spring, the force of the main-spring of a watch may, as I have already mentioned, be less than that of the hair-spring; and, according to the analogous mode of considering wants, the want of the most useful may be less than that of the least useful articles. Water is more wanted by a man almost dying with thirst, than by another who has quenched his thirst, and desires only to wash himself. It is on want, thus estimated, that value depends. It is not the same thing as the want, but it is proportional to it, and arises out of it. The gratification derivable from the use of an object must be taken to be equal to the want of it, thus estimated; and the value, properly speaking, is the feeling of affection or esteem for the object, arising from a sense of the loss of the gratification contingent on the loss of the object. In its ultimate sense, then, the term undoubtedly signifies a feeling of the mind, which shows itself always at the margin of separation between the satisfied and unsatisfied wants. One point, amongst others, in which it differs from utility, is, that it attaches only to an object in possession, while, with respect to the idea of utility, possession is a matter of indifference.

I think that the distinction which I have pointed out between the ways in which the forces of any two springs may be compared, will be found, if considered with attention, to throw great light on the difference between utility and value, to mark their respective limits, and to show clearly the point of contact, where the one idea is apt to pass into the other, and where the danger of confusion is mostly to be apprehended. It must, however, be

borne in mind, that the analogy subsists, only between the two ways in which the forces may be compared, and those in which human wants may be compared; and not immediately, between the two ways in which the forces may be compared, and the relation which subsists between the ideas of utility and value. The contemplation of this analogy will serve to explain the two different ways of considering human wants, and these being understood, it is then easy to pass on to the ideas of utility and value, which are connected with the different wants, and naturally arise out of them.

I intimated just now that there was danger of confusion. If, to a man who has already half a dozen coats, you should offer to give another, he might probably reply that he would have no use for it. Here, however, he would speak, not of the abstract utility of the coat, but of its special utility to him under the circumstance of his want of coats being already so far supplied. This, though not quite the same thing as value, approaches very near to it. The coat would be of no use to him; therefore, were he to have it, it would not be valuable in his estimation. He would have no reason for retaining the possession of it, or, were he to lose it, to regret the loss. But this is very different from the utility of the coat in the general sense of utility, and ought not to be confounded with it.

Perhaps the following may be a good rule for distinguishing between utility and value; and, if it is borne in mind, there will, I think, be little danger of confounding the two ideas. To obtain the idea of the utility of an object, imagine what would happen, what inconvenience would arise, from the loss, not of that object alone, but of the whole species to which that object belongs. Thus, to obtain the idea of the utility of water, imagine the predicament we should be in, were we deprived, not of a pail-ful which may chance to be before our eyes, and may stand destined to some particular use, but of the whole element of water. But value, as I have already mentioned, attaches to an object in possession, which, consequently, cannot be unlimited in quantity. To obtain, therefore, the idea of value, imagine yourselves deprived, not, as before, of the whole of the species, but only of the possession of a certain definite quantity. Take again, for example, the instance of the pail of water, and suppose it to be overturned. Its value would then be estimable, either by the inconvenience which would be felt, supposing the particular want which it was intended to supply to remain unsatisfied, or by the trouble of going to the well again, whichever might be

least. I may here remark that, though in the course of this lecture I have spoken of water as valueless, and it is the example commonly adduced of a very useful article quite destitute of value, yet this is only to be understood of exchangeable value. Water in possession has almost always some value. But this value, under ordinary circumstances, is small, and not equal to the trouble of an exchange. And on this account water rarely becomes the subject of exchange.

I have here been incidentally led to the mention of exchanges. But it is to be observed that, throughout the explanation, upon which I have hitherto been engaged, of the nature of value, there has been no need for one word about exchanges. As I have explained the idea, it consists in the real importance of an object to the person who possesses it—a definition, which may be collected from a passage of Adam Smith, as I mentioned in my last lecture. And objects may be of real importance to the person who possesses them, as much in the case of an isolated individual, such as Robinson Crusoe, as in the case of a society, such as exists in England, and in all other countries with which we are acquainted. The commercial intercourse, however, to which we are accustomed, and in which the idea of value is commonly more or less blended with that of an exchange, has been so long established, that it requires some effort of the imagination to form a distinct idea of value by itself, disengaged, on the one hand, from value in exchange, and, on the other, from the mere notion of utility. It would be difficult to collect the necessary illustrations from the facts and occurrences with which we are familiar; and cases purely hypothetical are less interesting and less instructive. I have been looking into *Robinson Crusoe* for examples of value, but have not found any thing so much to the point as I could have wished. Still the complete separation of the idea appears to me to be so necessary a preliminary, in order to a clear conception of the nature of value in exchange, and of the causes which determine it, that I think it not amiss to read to you the following passages, which are the best that I have been able to find.

I presume you to be all acquainted with the life and adventures of Robinson Crusoe. It will be remembered that in shaking out an old bag which he wanted for some purpose, he unconsciously sowed a few grains of barley and rice, which had chanced to remain in the crevices of the bag. After mentioning that these took root, sprung up, and ripened, the narrative proceeds thus :—

" I carefully saved the ears of this corn, you may be sure, in their season, which was about the end of June; and laying up

every corn, I resolved to sow them all again; hoping in time to have some quantity sufficient to supply me with bread; but it was not till the fourth year that I could allow myself the least grain of this corn to eat, and even then sparingly, as I shall show afterwards in its order."

In all this, he showed his sense, not merely of utility, but also of the value of his corn. I proceed, however to another passage.

"After I had been in my cave for some time, and found no more shocks of the earthquake to follow, I began to be somewhat more composed. And now, to support my spirits, which indeed wanted it very much, I went to my little store, and took a small sup of rum, which, however, I did then and always very sparingly, knowing I could have no more when that was gone."

His rum was valuable. Now let us see what he says about his ink.

"A little after this, my ink beginning to fail me, I contented myself to use it more sparingly; and to note down only the most remarkable events of my life, without continuing a daily memorandum of other things." Again:

"The next thing to my ink being wasted, was that of my bread—I mean the biscuit, which I had brought out of the ship: this I had husbanded to the last degree, allowing myself but one cake of bread a day for above a year; and yet I was quite without bread for nearly a year before I got any corn of my own."

In another passage he mentions finding on the sea-shore an infinite variety of fowls, on which he observes,

"I could have shot as many as I pleased, but was very sparing of my powder and shot."

I will not stop to remark farther on these passages, than that all this caution in the consumption of the different articles which he had saved from the ship, indicated a sense of their value, properly so called. That which has no value cannot be consumed to waste, and wherever there is the fear of wasting there is value.

It is justly observed by Locke, that in a man-of-war silver may not be of equal value to gunpowder. Yet, were the silver and the gunpowder on board, both of them public property, there would be no exchanges, and consequently no exchangeable value. And, in the same sense in which the gunpowder might be more valuable than the silver, we can understand how in a siege or sea voyage water can be valuable, though, being public property, it cannot become the subject of an exchange.

In general, in order to find instances of value existing without exchanges, we have only to exclude the commerce of a plurality

of properties. In every exchange there is a transfer of property. In the case, therefore, of a solitary individual, such as Robinson Crusoe, there can be no exchange, because then there would be nobody with whom to exchange. Again, in a country in which the division of labour is unestablished, and in which each man combines in his own person a variety of employments, and procures and prepares for his family whatever articles they consume, it is plain that barter and sale, and consequently value in exchange, would be unknown. Still these articles would be valuable—the possession of them would be of importance to the person possessing them, though they would not be exchangeable. So likewise in a society having an internal community of goods and no external trade, there could be no exchangeable value, because of the absence of plurality of properties.[1] We may imagine such a society to supply itself more or less plentifully with the luxuries, comforts, and necessaries of life. But these, though not exchangeable, yet should they be produced in a degree insufficient for the full supply of every want, would not be destitute of value.

Adam Smith remarks, that man is the only animal which makes exchanges. "Nobody," he says, "ever saw one dog make a fair and deliberate exchange of one bone for another, with another dog." "Nobody," he continues, "ever saw one animal, by its gestures and natural cries, signify to another, 'This is mine, that yours; I am willing to give you this for that.'" But we may observe, that dogs have a sense of value, though not of exchangeable value. Though nobody has ever seen two dogs making an exchange, yet a dog has been often seen to hide a bone. The dog does this from a sense of its value, properly so called. He does not do it merely from a sense of utility, or, in other words, because he likes a bone, but because he knows that a bone is a good thing which is not always to be had when wanted. In order that two dogs should make an exchange then, besides a sense of value, and besides also other circumstances which I shall hereafter explain, it would be necessary that they should understand and mutually acknowledge the rights of property. But to this degree of civilization dogs have not yet attained. The nearest approach to it that I know of is in Constantinople, where the dogs act the part of scavengers, and, it is said, have their

[1] Colonel Torrens adduces the cases of a country in which the division of labour is unestablished, and of a society having an internal community of goods, as examples of the existence of wealth where value is absent. In strictness, they are cases in which there is no motive for exchanging; and to me they appear equally well fitted to illustrate the separation of the idea of value as of that of wealth from all reference to exchanges.

regular beats, like beggars in London, no individual dog ever presuming to trespass beyond his own territory.

Some few examples of value, in which the idea of an exchange is not concerned, might perhaps be taken from common life. We can well conceive an article made expressly for the use of an individual, and to him actually both useful and valuable, when to every other human being it would be absolutely useless, and when it would, therefore, be altogether destitute of value in exchange. Extreme cases, however, such as this, where the whole of the value is altogether personal, are certainly rare. But cases in which a great part, though not the whole, of the value is lost in the exchange, are frequent. The value, to the person for whom it is made, of a coat made to order, cannot be estimated by what others would give for it. The same may be said of a seal marked with the crest and initials of its owner. Its value to the person to whom it belongs is increased by its being marked. But all this increment of value, and more than this, would be lost in an exchange. The same operation, which renders the commodity of more value in the estimation of its owner, is calculated to render it less valuable in the estimation of all other persons, and therefore of less value in exchange.

Such then is the notion of absolute as distinguished from comparative or exchangeable value. It signifies the real importance of an object to the person who possesses it, and in this sense it is surely easy to be understood, how an object can be said to vary in value without any reference to other objects express or implied. We can understand how, in a time of famine, corn *per se* may be said to be more valuable than in a time of plenty; and how, if labour becomes more effective, so that commodities of all kinds shall be produced in a degree of abundance greater in proportion to the wants of mankind, all sorts of commodities, though exchangeable in the same proportions as before for each other, could be said to have become less valuable.

In this sense of value, it may be remarked that, to a poor man, the same things are more valuable than to a rich man; and this sense, it may be further remarked, agrees with the use of the term in common discourse. The following, for example, is a passage I lately met with in an argument on the inequality of pecuniary punishments.

"No one would be absurd enough to maintain, that a guinea has the same value, and, therefore, would become an equal forfeiture to two persons, the one having a thousand and the other only ten of these."

And a little further on :

"Now the possession of personal liberty is equally dear, equally valuable to all, and the abridgment of it would, therefore, be equally felt by all; and this reflection naturally points to imprisonment as the substitute for punishment by fine."

It may be said, and to a certain degree perhaps with truth, that this notion of value, independent of an exchange, is very vague and undefined. But it is not more so than the idea of utility, which nobody pretends to refer to the mere relation of objects to each other. It would indeed be difficult to discover any accurate test, by which to measure either the absolute utility of a single object, or the exact ratio of the comparative utilities of different objects. Still it does not follow, that the notion of utility has no foundation in the nature of things. It does not follow, that because a thing is incapable of measurement, therefore it has no real existence. The existence of heat was no less undeniable before thermometers were invented, than at present. So neither does it follow, that because the idea of the value of an object, singly considered, is difficult to be grasped, therefore it can have no independent existence. Mr. Malthus asks very pertinently, whether in a country where there is nothing but deer, a deer could be said to be without value, because there would be no other object with which to compare it, when a man would walk fifty miles in order to obtain one.

Two questions, among others, have been agitated respecting value; the one, whether any object can have intrinsic value, the other, whether it can have absolute value. It is of this latter question that I have been treating, and I have been endeavouring to determine it in the affirmative, that is, to show that an object can have value of its own, independently of all comparison with the values of other things. The question about intrinsic value is different from this, though, as both intrinsic and absolute are opposed to relative, the two are apt to be confounded. I have maintained, that an object can have absolute value, but it is impossible to maintain, that it can have intrinsic value in the full sense of the expression. Intrinsic value means value inherent in the object itself, which must necessarily remain the same while the object remains the same, and could be changed only by a change in the internal constitution and nature of the object. Nothing, however, can be called valuable without reference to somebody to whom it is valuable; and, hence, according to the variations in the wants of the individuals to whom we refer, the same commodity, though retaining the same intrinsic qualities, is

variable in value. The term value, therefore, does not express a quality inherent in a commodity. It expresses, as I stated before, a feeling of the mind, and is variable with the variations of the external circumstances which can influence that feeling, without any variation of the intrinsic qualities of the commodity which is the object of it. It is one thing to maintain, that an object may have value independently of all reference to the values of other objects; it is quite another thing to maintain that it can have value in itself, independently of all reference to mankind. And I repeat, that it is the former proposition, and not the latter, that I have been maintaining.

To illustrate the absolute nature of value, I compared it with utility, observing, that the one was as much absolute as the other, and that the objections arising from the indefinite character of absolute value were equally applicable to utility, the idea of which was quite as indefinite and as little capable of mensuration as that of absolute value. To this point of similarity we may add the negative one, that the utility of an object is not intrinsic any more than the value. Utility, like value, is predicated of an object with a reference to the wants of mankind. Blankets are useful in England, but they are not useful, or at least not equally useful, in a hot climate. Ice is useful in summer, useless in winter. Still, the intrinsic qualities of blankets, and the intrinsic qualities of ice, are at all times, and in all places, the same.

Besides explaining the meaning of the term value, I had intended, in this lecture, to have also considered the question of the measure of value, and to have examined the grounds on which sometimes labour, and sometimes corn, have been assumed to be nearly invariable in their real value, and to be on that account fitted for measuring the varying values of other commodities. I find, however, that I shall not to-day have time for entering on these questions; I shall therefore conclude with setting before you once more the doctrine against which I have been contending, together with an illustration of it, which appears to me to be a very unfortunate one, though it has been used several times by the supporters of that doctrine.

"We can understand," they say, "what is meant by the value of cottons; viz. the quantity of other goods for which a given quantity of cotton will exchange. We can understand in what manner cottons may rise or fall in value; viz. when a given quantity of cottons comes to exchange for a greater or less quantity of other commodities than before; but what is meant by the value of the whole produce, or how the whole produce of the land, or labour of

a country, or of the world, can be said to rise or fall in value, is a problem of which we must leave to wiser heads than our own to discover the solution. Value is a relative term : if it is not this, it is nothing : if any one talks about absolute value, or any other kind of value than exchangeable value, we know not what he means."

This is from the *Westminster Review*. Again : M. Say observes, that " the valuation of an object is nothing more or less than the affirmation, that it is in a certain degree of comparative estimation with some other specified object." I quote this from M. Say, because it seems to be referred to in the following passage from an anonymous writer, containing the illustration to which I before alluded.

" All value is relative, as M. Say observes ; and as we should more easily bear in mind, if the word ' exchangeable,' or ' in exchange,' which in this sense it always implies, were always uttered and expressed. Now, all motion is relative : for by motion we merely mean, an alteration in the distance or interval between two things. But we have been accustomed, to save time, to use the word motion absolutely. When the distance between a ship and the whole mass of the country from which it set out, is altered, we say absolutely, the ship moves ; and if we were asked, whether the country moves too, should generally answer, ' no, it is at rest ' ; that is, because the ship is small compared to the country. Yet this same country, perhaps, at the same time, alters its distance with regard to the heavenly bodies, and is itself said, when considered in that point of view, to move ; the heavenly bodies being now said to remain at rest : but we still mean, that the distance between these bodies and our earth, or that particular part of it, is altered, and that they are more or larger than it. Yet from this way of speaking, from this habit of saying, for shortness, that the ship or the earth moved absolutely, in order to express that a relative motion or change of distance took place between them and some other things, philosophers long maintained that motion was inherent, and that if there were but one thing in the universe, it might yet move : that the earth, for instance, might be said to move absolutely, though the heavenly bodies were annihilated ; and if they were reminded that motion was relative, they would then assert, that the earth in such case would move relatively to the parts of space ; that is, by the very definition of space, relatively to nothing at all. ' There is nothing,' as Mr. Malthus observes in the Essay on Population ' which has given occasion to such a host of errors as the confusion between relative and positive.' "

Now all this appears to me to be a blunder arising from confounding the evidence of a fact with the fact itself. Value, it is here said, is no more absolute than motion is absolute. But I maintain that some motion *is* absolute. I deny that, by motion, we merely mean an alteration in the relative position of two things. I maintain, that it is true what philosophers long ago maintained, that if there were but one body in the universe, it might yet move; and that the earth might be said to move absolutely, though the heavenly bodies were annihilated. The only difficulty would relate to the evidence of the fact. Yet, under certain circumstances, the proof would not be desperate. When we observe the daily change in the relative positions of the sun and earth, we know at once that one of them has moved. But there still remains the difficulty of determining which of the two it is that has moved. We solve this difficulty, and ascertain that the earth has actually revolved on its axis, by the phenomena of the centrifugal force; and though, in the absence of the sun and the heavenly bodies, it would probably never occur to us to inquire respecting the earth's motion, yet, if we should take it into our heads to inquire about it, the same resource would remain to us. Then, as now, we should account for the diminution of gravity as we pass from the pole to the equator, by the supposition of a centrifugal force opposed to gravity, and arising from rotation. We should thus ascertain the absolute motion of the earth, notwithstanding the absence of any other body to which it could be referred.

As it is not true that all motion is relative, so, I must maintain, it is not true that all value is relative.

THE GENERAL STRIKE DURING ONE HUNDRED YEARS

THE term "general strike" seems to have no tolerably definite meaning. It has been used to describe strikes varying in magnitude, from the sympathetic strike affecting only a limited area, to a great strike on a national scale like the general strike of 1926. The words "general strike" are used by Mr. and Mrs. Webb in connection with the London tailors' strike in 1834, "in which 20,000 persons are said to have been thrown out of work"; [1] and again in referring to the Lancashire cotton operatives' "abortive general strike for an eight-hour day." [2] M. Halévy, in his recent *History of the English People*, 1815–30, remarks that in July 1818 the Lancashire spinners came out on strike, and in August the weavers joined them. "Even the miners prepared to throw in their lot with the strikers. Lancashire appeared on the verge of a general strike." [3] The same writer uses the words in a similar sense to describe the stoppage in Glasgow and neighbouring towns that followed the workers' proclamation of April 1, 1820.[4] This proclamation is interesting, since it reveals the existence of an ambitious plan; it urged a general cessation of work in England, Scotland and Ireland until a political revolution had been accomplished. In short, the issuers of the proclamation aimed at a political general strike of the most extensive type. The most important paragraph ran as follows:

> "Address to the Inhabitants of Great Britain and Ireland. . . . In the present state of affairs, and during the continuation of so momentous a struggle, we earnestly request of all to desist from their labour from and after this day, the First of April; and attend wholly to the recovery of their Rights, and consider it as the duty of every man not to recommence until he is in possession of those Rights which distinguish

[1] *Hist. of Trade Unionism* (1907), p. 134.

[2] *Ibid.*, p. 143. According to Beer (*History of British Socialism*, Vol. I, p. 318), the term first appeared in the *Herald of Rights of Industry*, April 5, 1834. John Doherty was the editor.

[3] Halévy, *Hist. of the English People*, p. 56.

[4] *Ibid.*, p. 82.

the Freeman from the Slave; viz. That of giving consent to the laws by which he is governed. . . .

" By order of the Committee of Organisation,
for forming a Provisional Government.

" *Glasgow*, 1*st April*, 1820."

The weavers of Glasgow and Paisley struck work on April 1, 1820; the colliers of the neighbourhood followed on April 3, and were joined by the cotton-spinners, machine-makers and founders.[1] But the stoppage did not become more general than this.

In spite of repeated failures, the idea of simultaneous collective action by the working people on a large scale has never been entirely abandoned, and at times—with aims sometimes political, and sometimes economic—it has been very much to the fore. The first proposal on record for the organisation of workmen into one general union was put forward by John Gast, a Deptford shipwright, and an able and energetic trade unionist.[2] Gast helped to found a society called the " Philanthropic Hercules." Its primary object seems to have been the creation of a strike and petitioning fund, by subscriptions of one penny per week per member. It was intended to be a central union of all trades, and trades that joined obtained the right to send delegates to its general committee. But apparently it did not survive very long.[3]

Another reference to a general union of different trades appears in William Cobbett's *Political Register* in 1825. Cobbett maintained that the unions of workmen then springing up were the outcome of high commodity prices; the " main body of persons (he says) engaged in these combinations know little about the *cause* of those *high prices* which cause them to combine. . . . They combine to effect a rise of wages. The masters combine against them. . . . The different trades combine, and call their combination a *general union*." [4] Again, in the early 'thirties, we find the Trades Union (*i.e.* a combination of the workers in different trades) much under discussion; the ideal was complete solidarity of all wage-earners in a single " universal " organisation.[5] This development evoked, of course, a great deal of hostile criticism, and, in 1834, William Lovett addressed an

[1] Cobbett's *Political Register*, April 15, 1820, pp. 360–2.
[2] Add. MSS. 27,819 (23): also Webb, *op. cit.*, p. 76 *n.*
[3] *The Gorgon*, December 5, 1818, and January 23, 1819.
[4] *Pol. Reg.*, August 27, 1825, p. 519.
[5] Cf. Webb, *op. cit.*, p. 103.

open letter to the editor of the *True Sun*, in defence of the new Trades Unions. He pointed out that the Trades Unions were intended to take the place of the old trade societies. Low wages had forced the workmen to adopt the plan in the hope that unity among a number of societies would afford a "greater means to accomplish their object." Thus, said Lovett, the Operative Builders had formed "a union of all branches in the building line," and subsequently the Consolidated Union had been formed; all with the same objects. Some of the trade societies, however, had held aloof.[1]

Probably the most active spirit in promoting the project of a great general union of trades throughout the United Kingdom (the aims of which were to be economic, not political) was John Doherty, the secretary (in 1829) of the Manchester Cotton-spinners' Union. In February 1830, the delegates of twenty trades held a meeting in Manchester, which resulted in the formation of the National Association for the Protection of Labour, with Doherty as general secretary. The membership of the new association was mainly drawn from the textile trades, and its object was to resist reductions of wages, but not to organise strikes for advances.[2] In the winter of 1830–31, when the cotton-spinners of Ashton-under-Lyne were on strike, and in the spring of 1831, fresh accessions of strength came to the National Association. The Belfast trades, the Potters' Union, and some 9,000 miners of Staffordshire, Yorkshire and Cheshire, all became affiliated. But lack of funds soon reduced the National Association to impotence.

At the beginning of 1832 a plan for a general strike on a national scale as an instrument of political reform was set forth by William Benbow in a pamphlet entitled *A Grand National Holiday and Congress of the Productive Classes*. The author of this piece of propaganda was born about 1780,[3] and was originally a Manchester cobbler. He had lived the exciting and precarious life of an agitator through the troublous times of the Hampden Clubs, the Six Acts, and the "Peterloo massacre" of 1819.[4] He had become a hardened revolutionary and an advocate of physical force. According to Henry Hunt, Benbow had been denounced by a Government spy, in 1816, for making pikes in readiness for a

[1] *Poor Man's Guardian*, August 30, 1834.

[2] Webb, *op. cit.*, pp. 106–7.

[3] *Northern Star*, April 25, 1840. The *Hull Packet* of August 16, 1839, guessed Benbow's age as "about 46" at that date, but the evidence clearly indicates that this is an under-estimate.

[4] Beer, *Hist. of British Socialism*, Vol. I, pp. 314–5.

projected insurrection.[1] Evidently Benbow had been in conflict with the authorities about that date. He was imprisoned in 1817 during the suspension of the Habeas Corpus Act, and released at the beginning of 1818. Early in 1819 a passing reference was made in the *Gorgon* to the popular victories "of late" in the Courts of Justice, such as the acquittal of Wooler and Hone, the disclosure of the "infernal machinations" of Oliver, a Government spy, and "the complete vindication of the characters of such men as Ward, Benbow, Knight, the Evanses," and others.[2] About this time Benbow went into the publishing trade, and, in June 1820, he became the publisher of Cobbett's famous *Political Register*. Ten years later we find him in London keeping a coffee-house, and helping to lead the left wing of the working-class movement. He was prosecuted, in 1832, together with Lovett and Watson, for organising a procession on March 21st; a day on which the Government had ordered a fast as a means of averting the cholera epidemic.[3] During the years 1836–38, Benbow was active in the Anti-Poor Law agitation, and in the cause of Chartism; and in 1839, after travelling all over Lancashire preaching the general strike, and hinting broadly at armed insurrection, he was arrested in the great "round-up" of Chartist leaders.[4]

This, then, was the man who advocated a "grand national holiday" or "sacred month." All productive activity was to cease for a month, and the strikers were to be the makers of a political revolution, peaceably if they could; forcibly if they must.

In 1831, when Benbow began actively to urge this plan upon the working classes, he was the proprietor of the "Commercial Coffee House" at 205 Fleet Street, near Temple Bar. He was also a member of the National Union of the Working Classes; he frequently took part in the weekly debates of that society, in company with John Cleave, Henry Hetherington, John Gast and other zealous and advanced Radicals (usually called the Rotundanists), and occasionally he was called to the chair.[5] Francis Place says of the Rotundanists:

[1] H. Hunt, *Memoirs* (London, 1820–2), Vol. III, quoted by Hovell, *The Chartist Movement*, p. 91.

[2] *The Gorgon*, January 23, 1819, p. 283; cf. *State Trials*, 1820, p. 182 *n*, and Huish, *Life of Henry Hunt*, Vol. II, p. 122.

[3] Brit. Mus. Add. MSS. 27,791 (255, 392), and 27,822 (26); also Pamphlet on *The Trial of Benbow, Lovett and Watson*, published by J. Watson (1833); and *Poor Man's Guardian*, March 24, 1832.

[4] *Northern Liberator*, August 17, 1839.

[5] *Poor Man's Guardian*, June 18, August 20, and October 29, 1831.

> "They denounced everyone who dissented from these notions [1] as a *political economist*, under which appellation was included the notion of a bitter foe to the working classes, enemies who deserve no mercy at their hands. Most of these men were loud and long talkers, vehement, resolute, reckless rascals." [2]

But this judgment is, in my opinion, too severe. It is tolerably clear that Benbow, who *was* an extremist, soon became a thorn in the flesh of the majority of the members of the National Union of the Working Classes. One instance is recorded by Lovett. It was proposed to hold a "grand meeting" on the question of parliamentary reform, in front of White Conduit House, on November 7, 1831; but the project was abandoned partly because of the Bristol riots and the excited state of the public mind, and partly because of "some very improper language used by Benbow at a meeting in the Rotunda . . . which language, however, was strongly deprecated by the Committee and members generally." [3]

At another meeting on September 28, 1831, a resolution in favour of universal suffrage, annual parliaments and vote by ballot was under discussion, and William Benbow, seconding the resolution, called attention to his "bantling," or as others would call it "a spoiled child of his own rearing." He wished again to impress on the minds of the working classes the necessity of a holiday for a month. He had, he said, a peculiar wish for a festival of that kind, and that it should emanate from a grand and solemn national conference. He assured the meeting that if the working classes would cease from their labours for one short month, such a lesson would be instilled into the heads of their taskmasters as would teach them to sing another song.[4] Three weeks later, Benbow again recommended his project to the working classes; he said that "he would tell them how easily they could humble their taskmasters without resort to anarchy, confusion, revolution or blood." [5] The last clause does not sound like Benbow, and it may be that he put it in in order not to alienate the moral force section of his audience. He contended that alliances with shopkeepers and the middle classes would not

[1] *I.e.* that everything which was produced belonged to those who by their labour produced it.

[2] Additional MSS. 27,791 (48), quoted in Wallas, *Life of Place*, p. 273.

[3] Add. MSS. 27,822 (24).

[4] *Poor Man's Guardian*, October 1, 1831.

[5] *Ibid.*, October 22, 1831.

forward the cause of the workers, but the national holiday would work such a transformation that afterwards the working classes would "all live well, and have three clean shirts a week (tremendous cheering)." [1]

As the excitement generated by the Reform Bill agitation became more intense, the discussions of the National Union of the Working Classes became less pacific. Towards the end of November 1831, they were discussing arms and Colonel Macerone's pamphlet on street warfare.[2] A kind of military organisation was adopted, and Benbów, who had become a "class leader," called upon all the old soldiers to go to their classes and teach their brethren military evolutions.[3] At the same time he continued to advocate the general strike and the organisation of the working classes in one "grand union." The Committee of the National Union of the Working Classes succeeded in persuading him to defer the publication of his plan for the national holiday,[4] but he made it clear that it was merely postponement, not abandonment, to which he had consented.[5] At a meeting on December 12, 1831, Benbow said that it was better to be idle than to work and starve. The men of the North had some notion of his holiday; but they must await the appointed time. All must act together. Let the holiday be unanimous and general, and in one month the people would obtain their rights.[6]

In the *Poor Man's Guardian* for January 14, 1832, the following notice appeared:

"This Day is Published, price 2*d*.

BENBOW'S

Grand National Holiday,

During which a 'CONGRESS' of the WORKING CLASSES will be held to put into execution a plan, which is to obtain *effectually* and *permanently* the rights and liberties of the People. The PAMPHLET developing this great plan—so

[1] *Poor Man's Guardian*, November 5, 1831.

[2] Extracts from Macerone's book, with illustrations of workmen armed with pikes resisting cavalry and infantry, were published in the *Poor Man's Guardian* on April 11, 1831. Alexander Somerville replied to Macerone in *Warnings to the People on Street Warfare*. Cf. Add. MSS. 27,821 (85); also *Weekly True Sun*, April 14, 1839.

[3] *Poor Man's Guardian*, November 26, 1831.

[4] *Ibid.*, December 3, 1831.

[5] *Ibid.*, December 10, 1831.

[6] *Ibid.*, December 17, 1831.

easy of execution, and so sure of complete success—will be published on Saturday the 14th of January.

"Published by W. Benbow; sold by Watson, 33, Windmill Street, and all Booksellers."

"Plundered fellow-sufferers," said Benbow in his pamphlet, "I lay before you a plan of freedom. Adopt it and you rid the world of inequality, misery and crime. A martyr in your cause, I am become the prophet of your salvation." He opens with a wholesale denunciation of the privileged few who live in the luxury produced by the despised travail of the miserable masses; the drudges of society. What working man, he asks, can say that he lives? His existence is a mere negative. "He is alive to production, misery and slavery—dead to enjoyment and happiness . . . if they are the source of all wealth—that wealth is not for them." [1] All the misery of the many may be traced to their ignorance, not of book-learning, but of their own power. By unity of thought and action the working classes could remove mountains of injustice, oppression, misery and want. But they must rely entirely upon themselves; to expect aid from other political parties would be "sheer madness," for they have no feelings in common with the suffering working classes.[2] The latter must have a month's holiday in order "to establish plenty, to abolish want, to render all men equal . . . the constitution drawn up during our holiday shall place every human being on the same footing. Equal rights, equal liberties, equal enjoyments, equal toil, equal respect, equal share of production. . . ." The proposed general strike was to last one calendar month and to extend throughout the whole of the United Kingdom. During the month a congress was to be held to "concert a plan whereby, if it is possible, the privation, wretchedness and slavery of the great mass of us may be diminished, if not completely annihilated." [3] The whole of the productive classes were to be organised and controlled by local committees throughout the country, and from each parish and district these committees were to select representatives to be sent to the national congress. A population of 8000 "shall send two wise and cunning men"; a population of 15,000—four; a population of 25,000—eight. London was to have fifty representatives.

But universal preparations must be made. The general strike ought to take place neither in seed-time nor in harvest-

[1] Benbow, *Grand National Holiday*, p. 4.
[2] *Ibid.*, pp. 7–8.
[3] *Ibid.*, p. 10.

time, but in the summer. The strikers must provide food for the first week, after which the sovereign people acting by means of their local committees would requisition whatever supplies they needed. " ' The cattle upon a thousand hills are the Lord's.' When the people's voice, which Lord Brougham proclaims to be the voice of God . . . demands the cattle of the thousand hills, who dares withhold the cattle? . . . During our holiday the people may have need of this cattle: let them order it to the slaughter-house, and their herdsmen and drovers will obey them."

The author admits that the plan is not " detailed and matured," and he invites suggestions from others. He contends that the working classes have, in the past, been too honest, too conscientious, too delicate; with the result that they had been duped by the few. But the time to throw off squeamishness had come. Let the workers boldly lay hands upon that which was their own.

In the following year, Robert Owen outlined his scheme for a general union of all trades,[1] and the Grand National Consolidated Trades Union was formed at the beginning of 1834, as the first step towards " the great changes which are in contemplation and which shall come suddenly upon Society, like a thief in the night. . . ." [2] Mr. and Mrs. Webb have expressed the opinion that " Nothing in the annals of Unionism in this country at all approached the rapidity of the growth which ensued. . . . The avowed policy of the federation was to inaugurate a general strike of all wage-earners throughout the country." [3]

These developments were not lost upon the Government of the day, and, wishing to suppress combinations of working men, it discovered a forgotten, but convenient, old Act of George III which made it a penal offence to administer illegal oaths. This weapon was used, as is well known, against the six Dorchester labourers, who were sentenced to seven years' transportation. The Trade Unions united in a common protest, and the Grand National Consolidated Trades Union organised a great procession which, but for the energetic counter-measures of the Government, and the inexperience of the unions, might easily have developed into a general strike.

Although the Grand National Trades Union failed to hold together beneath the blows of the employers and the law,[4] the

[1] *The Crisis*, October 12, 1833.
[2] Podmore, *Robert Owen*, p. 445.
[3] Webb, *op. cit.*, pp. 120–2.
[4] See Rosenblatt, *The Chartist Movement*, p. 80.

idea of the general strike persisted. The severe trade depression of 1836–39 crippled the Trade Unions, but produced Chartism; and the general strike as a political weapon again came under discussion. In the Chartist National Convention, on February 11, 1839, Feargus O'Connor told the delegates that all the courtesy in the world would not impress members of Parliament: the best way to make an impression on them was to go with the Petition in one hand and ulterior measures (which included the general strike) in the other. But James Bronterre O'Brien differed. He thought that courtesy was the best policy, for " no set of men like to be bullied." [1]

The general strike was discussed by the Chartist leaders as one among five or six methods—such as refusal to pay taxes, and a run on the savings banks—of bringing pressure to bear upon the Government if (as seemed highly probable) the petition to Parliament [2] embodying the famous six points should be rejected. On April 22, 1839, O'Connor made a speech suggesting that the general strike might prove a useful and important weapon in the campaign. The workers, he said, could " meet the cannon with the shuttle." But no definite action was decided upon at that time.[3] Little more than a week later, ulterior measures were again mentioned in connection with the proposal that the Convention should move away from London. On May 1, O'Connor proposed that the sittings should be held in Birmingham on and after May 13. Replying to a question put by O'Brien, O'Connor said that he hoped never to see the Convention sitting again in London, once it had left for Birmingham.[4] There was a great deal of discussion. In the end O'Brien submitted the following motion:

> " That until the people's demands of the National Petition, and the People's Charter shall have been submitted, and decided upon by the Legislature respecting our demands, it is the duty of the Convention to continue its sittings in London, but in the event of the Legislature rejecting our demands, this Convention is of opinion that its sittings ought forthwith to be removed to Birmingham or Manchester, and that we do hereby resolve that we will make Birmingham or Manchester the scene wherein we will make the discussion of ulterior measures."

[1] Add. MSS. 27,821 (31).

[2] Described by Francis Place as " that piece of absurdity." See Place Collection B.M. Hendon, vol. 56, 1836–38, Intro.

[3] *The Charter*, April 28, 1839.

[4] Add. MSS. 27,821 (102).

Hetherington suggested that the reference to ulterior measures should be omitted, and to this O'Brien agreed. The amended motion was then carried by 20 votes against 17.[1]

Clearly, opinions among the members of the Convention were much divided; but gradually, as the deliberations dragged on, the idea of a general strike gained somewhat in popularity, while the idea of an appeal to arms fell into the background.[2] But there can be little doubt that the more revolutionary members—the physical force men—regarded the general strike merely as one way of commencing a rising.[3] Many of the moderates, on the other hand, were not enamoured of the project at all: they thought that there would not be a sufficient response to a general strike call. William Lovett, the secretary of the Convention, urged that the strike ought to be delayed pending the collection of a proper strike fund.

Disraeli's well-known novel *Sybil* (1845) gives us an interesting and, I believe, substantially accurate picture of the part which some of the Chartists hoped to make the general strike play in their campaign for political reform. Says a Chartist leader in *Sybil*:

"There are to be no leaders this time, at least no visible ones. The people will do it themselves. All the children of Labour are to rise on the same day, and to toil no more, till they have their rights. No violence, no bloodshed; but toil halts, and then our oppressors will learn the great economical truth as well as moral lesson, that when Toil plays, Wealth ceases. . . . The Benefit Societies, the Sick and Burial Clubs, have money in the banks which would maintain the whole working classes, with aid in kind that will come, for six weeks, and that will do the business. And as for force, why there are not five soldiers to each town in the kingdom. It's a glittering bugbear, this fear of the military; simultaneous strikes would baffle all the armies in Europe."[4]

Upon the day after their arrival in Birmingham, the members of the Convention began to discuss the issue of a manifesto, and a plan to hold numerous public meetings at Whitsuntide 1839, at all of which a list of questions chiefly relating to ulterior measures were to be submitted. Once again great differences of opinion arose. Lovett was in favour of a manifesto because it was the most straightforward line of action. John Cleave, Halley and

[1] Add. MSS. 27,821 (103).
[2] *The Charter*, May 19, 1839.
[3] See Gammage, *Hist. of the Chartist Movement* (1894), p. 127.
[4] *Vide* Book VI. chap. v.

others were definitely opposed to it. O'Brien did not favour its adoption at that moment. He said that, generally speaking, he agreed with every article recommending ulterior measures, but he was afraid that a refusal to pay rents and taxes would give the Government an excuse for interfering that would prove fatal to the Chartist cause. They might even become liable to a charge of conspiracy. Therefore he suggested that 10,000 copies be printed and circulated in Great Britain in order to take the sense of the country on the matter before the Convention officially adopted the manifesto as its own.[1]

In the end the manifesto was passed. The Chartist leaders now seemed disposed to rely mainly upon their chief economic weapons, which included the general strike. The Whitsuntide meetings were to be asked (*inter alia*) :

> " whether, if the Convention shall determine that a sacred month will be necessary to prepare the millions to secure the Charter of their political salvation, they (the Chartists) will firmly resolve to abstain from their labours during that period, as well as from the use of intoxicating drinks ? "

The weakness of this proposal lay, of course, in the fact—which many of the Chartist leaders could not, or would not, grasp—that the rank and file of the Chartists up and down the country were not a majority of the working classes. A significant entry in the private journal of Sir Charles Napier clearly indicates that large meetings even in 1839 did not necessarily mean a large following. General Sir Charles Napier was at that time in command of the Northern District, and his sympathies were strongly with the working classes in their desire for political reform and economic betterment.[2] He wrote :

> " April 22nd.—Went to a meeting. . . . There were nearly three thousand people, most of them spectators taking no interest in the proceedings ; no cheer followed the orator's expressions, it was like a religious meeting. Was this deep attention or not ? In my mind not, for numbers came and went the whole time, and plenty of a Chartist description walked about wholly inattentive to the speakers. Feargus O'Connor and Bronterre O'Brien were advertised to be the orators, but did not come." [3]

[1] *Birmingham Journal*, May 18, 1839.
[2] Cf. Bruce, *Life of Sir Charles Napier*, chap. iv.
[3] Sir W. Napier, *Life of Sir Charles Napier*, Vol. II. p. 11.

Lovett tells us that during the Whitsuntide recess the minds of the more prudent members of the Convention were disturbed by the question of the proper course to take when the Convention reassembled at Birmingham. "For though many of them (says Lovett) had advocated the possession of arms, as an ancient and constitutional right, and as a means for securing protection and respect, they were far from advising the public exhibition or use of them. Still less were they agreed upon the propriety of a general suspension of labour for a month, although they were not adverse to the discussion of the subject as a threat to our adversaries." In Lovett's opinion it would have been better if the Convention had dropped entirely the discussion of the general strike. He also had in his mind a plan to test the country by fixing a day "for one or two trades to cease from labour," and calling upon the remainder of the workers in the country to raise a fund to support the strikers. Lovett argued that if the persons not on strike would not contribute to the fund, they certainly would not strike in a body at the command of the Convention. I believe that Lovett felt fairly certain that the fund would be a failure, and hoped, in this way, to dispose finally of the general strike project.[1] If he did, his hopes were not realised.

On July 3, 1839, the left-wing members of the Convention reopened the question of ulterior measures, and urged early action on the ground that the meetings of the past six weeks had demonstrated that their followers were ready.[2] By this time, however, the general strike had waned somewhat in popularity among the Chartist leaders as a whole, and there was much irresolution. The discussion dragged on in the Convention until July 12, when it finally published a manifesto in favour of ulterior measures, but with the sacred month in very small type at the bottom of the list. It so happened that on the same day the Chartists' first great Petition was rejected in the House of Commons by 235 votes against 46.[3]

In view of this rebuff, and their previous parade of ulterior measures, the Chartist leaders felt that they *must* do something, and, on July 15, 1839, they commenced to discuss the general strike again. After two days' discussion, during which many members (including Feargus O'Connor and James O'Brien) were absent, the Convention decided by 13 votes to 6 to commence a general strike on August 12, 1839. But the moment chosen was

[1] Lovett, *Life and Struggles* (Bohn's Ed., 1920), Vol. I. pp. 220–1.
[2] Add. MSS. 27,821 (283 and 292).
[3] Hansard, 3rd Series, Vol. XLIX. pp. 220 *et seq.*

most unsuitable. Trade was severely depressed; the adherence of the trade unions was extremely doubtful, for the Trade Union Movement was not the Chartist Movement, and many trade unionists were not Chartists; and no plans or preparations of any kind had previously been worked out. Moreover, having made the momentous decision, those who had voted for it began to lose their nerve, and many of those who had not been present to vote became either critics or prophets of woe. James O'Brien, who had all along been an advocate of physical force and revolution, told the Convention on July 22, 1839, that while he adhered to his belief that the general strike was an ideal political weapon, the Convention was not competent to wield it. Neither in the Convention nor in the country was there unanimity upon the wisdom of calling the general strike. Therefore failure was certain; and in any case the decision ought to be left to the people, who, after all, were the best judges of their ability to withstand the exigencies of a strike. As a result of this speech the Convention appointed a committee to take the sense of the people, which really meant the abandonment of the general strike policy.

The actual resolution, which was submitted by O'Brien, and carried by 12 votes against 6 (7 abstentions), was worded as follows:

> "That while the Convention continues to be unanimously of the opinion that nothing short of a general strike, or suspension of labour throughout the country, will ever suffice to re-establish the rights and liberties of the industrious classes, we nevertheless cannot take upon ourselves the responsibility of dictating the time or circumstances of such strike. . . ." [1]

The chief reasons assigned for this decision were:

1. The diminished numbers of the Convention, owing to "desertions and arbitrary arrests." [2]

2. Diversity of opinion both within the Convention and outside.

3. The great privation and suffering to which a strike that was only partially complete would lead.

4. The people themselves are the only fit judges of their "right and readiness to strike work."

[1] Gammage, *History of the Chartist Movement* (1897), p. 146.

[2] The Convention was, by this time, left with little more than one-quarter of its original strength.

The *Northern Star* of July 27, 1839, announced that on July 25, "after six days' excited discussion, the following resolution, unanimously adopted by the Amalgamated Committees," was also unanimously adopted by the full Convention :

> "Resolved—That the Convention, having previously appointed the 12th of August as the day for the general cessation from labour, it becomes necessary to appoint a council, which shall sit in London, and whose duty it shall be to receive evidence from those delegates, who shall forthwith return to their respective constituencies, and also from the country at large, with a view of taking the most effectual means of giving effect to such plan as the majority of the working classes shall decide upon."

A council of seven was then appointed, viz. O'Connor, O'Brien, Fletcher, Carpenter, Lowery, Smart and Burns.[1] A notice appeared in the *Northern Star* on July 27, calling upon every body of working men in the kingdom to address the Convention as to their desire, means and power of carrying out a general strike. They were exhorted to speak out at once, not allowing their enthusiasm to influence their judgment.

The communications that began to flow in from the provinces to the committee raised innumerable difficulties, and showed quite clearly that the general strike, if it had been declared, would have been a complete failure. Nobody who reads the letters preserved at the British Museum [2] can come to any other conclusion. Moreover, the newspaper reports of meetings tell the same tale.[3] For instance, early in August 1839, a meeting to discuss the proposed general strike was held at Rochdale. John Taylor, one of the members of the National Convention, was in the chair. There were between 5000 and 8000 working people present, and, according to the report in the *Northern Star*, they were most attentive when the sacred month was mentioned. But they were by no means united. John Deegan, the chief speaker, recommended that the general strike should be commenced on August 12; and a journeyman tailor from Heywood declared that all was ready in his town; but another speaker thought that the men of Rochdale were *not* ready, and the chairman concurred in this opinion. Finally, a resolution was passed to the effect that if other towns commenced the general strike on

[1] *Northern Star*, July 27, 1839. Gammage says that there were five members.
[2] Add. MSS. 34,245 B (38, 110, 119, etc.).
[3] Cf. also Gammage, *op. cit.*, pp. 145–8.

August 12, the men of Rochdale would join in, but they would not be the leaders in the affair. After the meeting, Deegan was arrested.[1]

In his Journal, under date July 25, 1839, Sir Charles Napier wrote :

> " The Chartists say they will keep the *sacred month.* Egregious folly ! they will do no such thing ; the poor cannot do it, they must plunder, and then they will be hanged by hundreds : they will split upon it, but if mad enough to attempt it they are lost." [2]

Again, on August 2, the following entry occurs :

> " Sacred month ! Do they imagine they can make the people of England stop work for a month ? . . . It is a farce, but the attempt may produce a tragedy, and to prevent that is in some degree my affair."

The situation on the eve of August 12, Napier describes as " all on tiptoe ! Everyone expects a row," but he adds, " not yet, the pear is not ripe."

On August 6, 1839, the council of Chartist leaders published a resolution stating that they were unanimously of the opinion that a general strike was impracticable. Instead, they urged " the trades of Great Britain " to co-operate " as united bodies with their more distressed brethren " in making a grand national moral demonstration on August 12.[3]

Meanwhile Benbow was not idle. His *Grand National Holiday* was still on sale,[4] and its author was still busy urging the people of the North to put his plan into operation. His activities, however, were cut short by his arrest on August 9, 1839, at his house at 27 Lower Mosley Street, Manchester, on a charge of using seditious language at a meeting a month or two before.[5] Benbow was kept in prison until the Cheshire Spring Assizes in April 1840. When he was at last tried, on April 10, 1840, the case against him was that at Stockport on Sunday, June 9, 1839, he had used inflammatory language and had incited the Queen's subjects to take arms. Joseph Sadler, Superintendent of the Stockport police, was called as a witness, and said that he had attended the meeting in question. There were about 500 persons

[1] *Northern Star*, August 17, 1839.
[2] Sir W. Napier, *op. cit.*, Vol. II. p. 63.
[3] Gammage, *op. cit.*, pp. 154–5.
[4] *Northern Star*, May 25, 1839.
[5] *Manchester Times*, August 10, 1839.

present, and Benbow, and a companion called Mitchell, made speeches from a cart. Benbow told the crowd that they had done nothing for themselves, and that it was not until the people resolved to fight their own battle that the rapacity of the landlords, and the bishops' tithe proctors, would disappear. According to the witness, Benbow then began to make reference to a pamphlet that he had in his hand. He advised every man "to get a sharp pike, about six inches long, and carry it in his side pocket, to defend himself against any of his oppressors that attempted to interfere with him." He also advised a complete cessation of work for a month, and continued to read passages from his pamphlet (which was undoubtedly the *Grand National Holiday*), applying them to persons living in the locality. After the first week of the national holiday, said Benbow, let 50 of them go to Major Marsland and ask for a load of corn, and if he refused, let 500, 1000, 10,000, or even 50,000 go, and then they would get it.

Another witness, R. Beswick of the Manchester Police, stated that when he apprehended Benbow he asked him if he was the author of a pamphlet entitled *A Grand National Holiday of the Productive Classes*, and the defendant had answered "Yes."

At this point Benbow asked the Judge if he thought that there was a case to go to the jury; the Judge answered in the affirmative and the case proceeded. Benbow spoke for about ten and a half hours in his own defence, and must have wearied the Judge and jury beyond measure. He read long passages from a brief that he had before him, and sought to vindicate the principles to which he held. The Attorney-General made a brief reply, and the Judge, addressing the jury, deprecated Benbow's observations, most of which, he said, were beside the point and somewhat aggravatory of the charge.[1] The jury found Benbow guilty and the Judge passed sentence of sixteen months' imprisonment.[2]

The *Northern Star* printed Benbow's "long but able speech, in defence of himself and his principles," and added that it manifested throughout that spirit of uncompromising dignity which ought always to accompany the right.[3]

The imprisonment of most of the Chartist leaders during 1840 administered a temporary check to the movement. But the economic causes of Chartism remained, and a revival soon followed the release of O'Connor, O'Brien and other leaders. After the

[1] *Northern Star*, April 18, 1840.
[2] *Manchester Times*, April 18, 1840.
[3] *Northern Star*, April 25, 1840.

failure of the second Chartist Petition in 1842, an attempt was made to take advantage of an outbreak of strikes in Lancashire and district, in order to bring about a cessation of labour throughout the country.[1] The strike movement—originally a protest against wage reductions—spread from Lancashire, where Thomas Cooper tells us that "a wild general strike" was in progress,[2] northward to Glasgow and the Tyneside, and down through Staffordshire and the Midlands. A delegate meeting of the Lancashire and Yorkshire trade clubs decided to urge all workers to cease work until the Charter became the law of the land.[3] In the course of a week, says Thomas Cooper, who was one of the Chartist leaders on the spot, similar resolutions had been passed in all the great towns of Lancashire; "tens of thousands had held up their hands in favour."[4] A conference of Chartists gathered at Manchester on August 17, 1842, and resolved upon the same policy. There were nearly sixty delegates present, and they all wished to keep the people from returning to work, for they "believed the time had come for trying, successfully, to paralyse the Government."[5] Cooper was in favour of a strike on a national scale, although he felt certain that it would lead to fighting. M'Douall drew up a "fiercely worded" address to the working men, urging a "universal strike." There was a little opposition. William Hill, editor of the *Northern Star*, opposed the strike altogether; in his opinion it was foolish and a great mistake; but only five delegates voted with Hill against the strike policy. Feargus O'Connor voted in favour of the extension of the strike, but did not really intend to do anything to further the project.[6]

Although the strike movement in the autumn of 1842 was widespread, it did not become "general" in the modern connotation of that term. That is to say, it did not spread all over the country and cause a suspension of the essential services. Work was resumed in some districts at the moment when workers in other areas were about to go out on strike. The *Northern Star* urged the absolute necessity of organisation on a national scale, and declared against the strike movement then in progress because of the absence of the "element of nationality,"[7] arguing that a general cessation of labour in "any given district," if

[1] Cf. Dolléans, *Le Chartisme*, Vol. II. pp. 210–25; and Hovell, *The Chartist Movement*, p. 260.
[2] *Life of Thos. Cooper*, by himself, pp. 190–1.
[3] *Northern Star*, August 20, 1842.
[4] Cooper, *op. cit.*, p. 191.
[5] *Ibid.*, p. 208.
[6] Cooper, *op. cit.*, pp. 209–11.
[7] *Northern Star*, August 27, 1842.

kept up for a long period, must lead not only to shortage of food among the strikers and their families, but to attempts to obtain food by means that would result in a clash with the authorities. The latter would then suppress the movement by force. But "an universal strike would be free from these risks; for its very appearance would at once paralyse the arm of power and sicken the heart of faction. . . . Dearly, therefore, as we would love to see the millions with one shout throw down their tools, and fold up their arms, while faction stood, as she would then stand, amazed, dismayed and powerless, yet we fear that this will not *now* be the case." [1]

There was another important reason why the strikes of 1842 did not develop into a general or "universal" strike. The members of the Trade Unions were, as a body, by no means convinced of the wisdom of becoming involved in a political movement. How long it would take to bring about the political changes outlined in the Charter no one could say; men and women were already starving, and it was, after all, not *certain* that any great improvement would follow the triumph of Chartism. Moreover, a great many trade unionists were definitely and strongly opposed to any merger of the Trade Union movement with Chartism. A case in point is quoted by Mr. and Mrs. Webb:

> "When Chartist meetings at Sheffield were calling for a 'general strike' to obtain the Charter, the secretaries of seven local Unions wrote to the newspapers explaining that their trades had nothing to do with the meetings or the resolutions." [2]

The final decline of Chartism, and the growth in the strength of the Trade Unions, accentuated this non-political tendency. It is true that during the manhood suffrage agitation of 1866–7 the ghost of ulterior measures began to walk. George Potter and William Randal Cremer, both labour leaders, talked of a general strike if Parliament refused to give the vote to working men; and Edmond Beales, a well-known Liberal, hinted at non-payment of taxes. But it was, as Mr. C. F. Brand has said, like 1832 over again (except that the results were better for the working men). People were excited; feeling ran high; no such popular upheaval had been known in England since 1839.[3] But it is

[1] *Northern Star*, August 13 and 20, 1842.

[2] *Hist. of Trade Unionism* (1907), p. 159; cf. *The Times*, August 15, 1842.

[3] *The Commonwealth*, October 26, November 24, and December 25, 1866, April 27 and May 4, 1867.

more than doubtful whether any attempt would have been made to carry the threat of a general strike into effect. Probably the references to it were merely "bluff."

Therefore it is true to say that, with the exception of the events of 1866–7, interest in the general strike declined in Britain during the second half of the nineteenth century, but increased on the Continent, where a good deal was said and written on the subject—but very little was done. From the literature, however, it is possible to distinguish fairly clearly four forms of the general strike; viz. (*a*) revolutionary, (*b*) anti-war, (*c*) political and (*d*) economic.

The revolutionary form, advocated very largely by the French Syndicalists, means that the proletariat would "down tools" as a means of paralysing the bourgeois economic system, and setting up some other form of social organisation in its stead. Professor Meredith Atkinson has suggested that "the extreme theorists of the French School" regard this as an inspiring "myth" useful to keep up the workers' courage and enthusiasm.[1] It is, indeed, questionable how far they would be prepared to seize the first good opportunity to attempt to translate theory into practice.

The general strike against war is another form. Its possible efficacy seems to depend upon two factors, viz. (*a*) the extent to which national passions are inflamed at the time, and (*b*) the possibility of getting a simultaneous general strike in *both* would-be belligerent countries. "This looks well on paper," says Mr. G. D. H. Cole, ". . . but there is nothing so certain as that, at the first breath of a war-scare, all the peaceable professions of the workers will be forgotten, and jingoism will sweep like a scourge over the country."[2] Experience in 1914 certainly confirms this view. In 1920, "direct action" in the form of a general strike was threatened in case Great Britain should go to war with Russia. Neither the war nor the strike took place.

The political general strike aims at bringing pressure to bear upon the Government in order to force it to take a specified line of action. Thus this form of the general strike cannot be said to be revolutionary, for it threatens neither the existing structure of the State nor the Government. But it might with more justice be described as unconstitutional, especially in a country where the great bulk of the people are enfranchised. Sweden has had one strike of this type (in 1902), which was merely an

[1] Article on "History of the General Strike," in *The Nineteenth Century Review*, June 1926.

[2] *The World of Labour*, p. 196.

organised protest for a fixed period. In Belgium there have been three political general strikes: in 1893, 1897 and 1902. The first succeeded to some extent, largely because it was a novelty; an unknown quantity: the others failed because they were not. The German Trade Unions employed the political general strike in 1920.

The general strike on economic grounds is really an extended form of the "sympathetic strike," but cases might easily arise in which it would be very difficult to decide whether purely economic motives alone, or mixed economic and political motives, really lay behind the strike. The idea of the complete solidarity of labour, especially in defence of existing wages and hours, is not new. From Owen's day it came down, manifesting itself in sympathetic strikes, the Triple Alliance of miners, railwaymen and other transport workers, and the Congress of Trade Unions, until at last, in May 1926, the people of Great Britain found that a general strike in defence of the coal-miners' standard of life had actually occurred.

The contrast between 1839 and 1926 is complete. The recent general strike was called by responsible leaders of the Trade Union movement; its objects were economic; and a strong organisation, with large funds, existed to carry it into effect. On the other hand, the opposing organisation was far stronger than anything that could have been produced ninety years ago. The "sacred month" proposal was made, as we have seen, not by Trade Union leaders, but by political agitators who had little solid support from trade unionists as individuals, and rather less from the unions themselves. Moreover, there was, in the 'thirties, no national organisation capable of conducting a great general strike, and no funds to support the strikers. The "national rent," which barely supported the Convention and its expenses, would have ceased to come in if a general strike had actually commenced. But the weight of the evidence gathered into the foregoing pages indicates clearly that the project would never have materialised, even if the members of the Chartist Convention had been better leaders than they were.

It seems that the future of the economic general strike depends primarily upon (1) the co-existence among trade unionists of great numerical and financial strength, coupled with a high degree of solidarity upon a broad issue; (2) the national temperament, and (3) the ratio between the organised industrial workers and all other sections of the community. Where the disparity in numbers is largely in favour of the latter, the economic general

strike has no chance of success, so long as the national temperament is of the steady, stolid, orderly type. Thus in the Anglo-Saxon, Teutonic and Scandinavian countries the economic general strike appears to have little future. But, on the other hand, we must not forget that in industrial conflicts, as in wars, the immediate causes tend to be forgotten in the heat and incidents of the struggle.

ALFRED PLUMMER.

FAMILY ENDOWMENT AND THE BIRTH-RATE IN THE EARLY NINETEENTH CENTURY

Both from the point of view of the supporters of Family Endowment schemes and their opponents the eugenic effects of the system loom very important, judging from the vast amount of criticism and speculation in which both sides indulge. But there is so far on either side an astonishing lack of unanimity as to the nature of these effects.

This must naturally be the case when the scheme is viewed from such diverse angles as that of the Neo-Malthusian and the Race Suicide theorist, and where, moreover, positive evidence is so rarely available to support the contentions of any side.

It is our purpose, then, to challenge an assertion very frequently made both by opponents and supporters of the scheme, namely, that it is a means of encouraging large families.

On this assumption this tendency ought to show itself in vital statistics in the form of an increased birth-rate. The thesis we want to maintain is that this does not happen. On the contrary, we believe it will be possible to trace a definite correlation between such a scheme and a decreasing birth-rate. If increase in the population can be shown to result, and we do not think this has been done, it will be in the form of a decreasing death-rate among children during the years when they come under the scheme.

The effect of this conclusion would be to shift the whole of the Populationist's objection to the introduction of family endowment. We may find many to argue that it is a bad and dangerous thing to encourage the birth of more children into a world already full almost to the optimum point. But there are few now who will carry this argument so far as to recommend a drastic reduction in the standard of living of large sections of the population, not indeed in order to decrease the number of their children, but in order that more of these children may be weeded out by malnutrition and disease before they reach maturity.

The argument is probably familiar that Family Endowment restricts population by raising the standard of living of those to whom it applies. A higher standard increases self-respect

and the possibility of a good life. Man and woman alike recognise the impediment of a large family to such a good life, even if the economic burden of the children is not to be borne entirely by them. They therefore voluntarily restrict the size of the family, and a decreased birth-rate, that desirable end of all but the Race Suicide theorists, will result.

But arguments on either side are empty theorising until such time as they shall have stimulated investigation into the objective facts. What has happened when Family allowances have been tried? Has an increase or a decrease in the number of births resulted? With a view to answering such concrete questions as these we have undertaken an inquiry into the actual working of a Family Endowment scheme in England under conditions least favourable to our contention.

From 1795 to 1834 there existed in this country over districts varying in extent and character a system of making up the wages of agricultural labourers to a subsistence level out of the Poor Rates. The needs of the labourer, and hence the minimum of his weekly requirements in money and food, were calculated according to the number of children in his family. A typical scale is that used by the Cambridge Justices in 1821, a period when the "subsistence" level was calculated on an extremely low basis, owing to the pressure on the Poor Rates.

County of Cambridge

Condition of family.	Value in quartern loaves per week.
Single woman.	Value of 3 quartern loaves per week.
,, man.	,, 4 ,, ,, ,,
Man and wife.	,, 7 ,, ,, ,,
Man, wife and 1 child.	,, 8 ,, ,, ,,
,, and 2 children.	,, 9 ,, ,, ,,
,, and 4 or more children.	,, 2 quartern loaves per head per week.

It is difficult at this distance of time to calculate whether the addition of the extra loaves per week, which, assuming the needs of man and wife to be fixed at seven quartern loaves, increases progressively with the increase in the number of children (when there is one child, allowance for it is one quartern loaf; when there are six, $1\frac{1}{2}$ loaves per head), was sufficient to act as a spur to the procreative tendencies of the labourer. But it is interesting to notice that at the time when the scheme was working the opinion of contemporaries was unanimous in condemning it on the ground that it led to improvident marriages,

bastardy and an increase in the legitimate birth-rate also. Such statements abound in the Reports of the Poor Law Commissioners. Chadwick, in giving evidence from Leckhampstead, says, "the effect was that the young people married much earlier in order to obtain the bread allowance." "Large families, legitimate or not," says Mr. Villiers, "were considered by them an advantage." A reference occurs to "the increase of population, which evidence shows to be produced by the present state of the law and its administration" (Report, p. 230). We may take it then that in the eyes of those better equipped than ourselves to judge of the efficacy of the bribe, even such a meagre scheme of payment per number in family was sufficient to lead to those large families whose existence we sought to discern statistically.

The search for this proof is still in progress. Our method was, in brief, to find movements in the birth-rates of England generally, of counties especially affected by the scheme, of specified parishes stressed by the Commissioners and their correspondents in 1834 and in subsequent reports, for a space during part of the period when the Speenhamland Family Allowance scheme was in operation, and of the same places for another period later in the century. It will be objected, perhaps, that it is useless to compare two widely separated periods in this way and expect differences to be due to one factor only, operating in the earlier period and removed in later. Surely a host of other factors have varied at the same time. But the whole weight of those factors should be in the direction of lower figures for the later period, or at least a rising rate for the earlier and a slumping rate for the later period.

By 1859, when the second period which we have taken for investigation begins, the Public Health Movement has begun, the tremendous percentage increase in the population figures has dropped. And since the death-rate can hardly be supposed to have risen during a period of health improvement, surely, it will be said, this diminished rate of increase must be due to a falling birth-rate. It is difficult to be dogmatic on this particular issue, owing to the hypothetical nature of the earlier statistics. Figures for births are not moderately accurate until 1851; they do not exist until 1841. The earlier figures based on Baptism Registers must necessarily be taken with caution. But if we know of no outstanding change that would affect the proportion of babies born which were also baptised, we can at least compare figures compiled from parish registers with one another if not with the more accurate figures of the Registrar-

General's Report. Below then is a temporary result in statistical form of our investigation into the effect of Parish Relief by Family Allowances on the actual birth-rate as far as calculable.

MOVEMENTS IN BIRTH-RATE UNDER SPEENHAMLAND AND AFTER

Place.	No. of births per 1000 per annum.					
	Under Speenhamland. Baptisms Registered.		After Speenhamland. Registrar-General.			
	1811.	1821.	1850.	1855.	1859.	1864.
England and Wales .	33·3	28·6	33·4	33·8	34·94	35·64
Bedfordshire . . .	31·3	29·08	36·08	33·7	36·4	35·8
Kent	33·3	31·4	31·96	31	33·1	—
Essex	30·3	27·6	32·62	31·0	39·1	32·6
Nottinghamshire .	29·4	30·2	—	—	39·3	34·9

The definite slump in the baptism rate comes between the years 1811 and 1821, a period when the number of deaths per 1000 persons living has declined from an estimated 20 to 18·2, and when the increase in the population is at the rate of 1·8 per cent. per annum, the highest that it has ever reached. Other figures for the period investigated, though not yet sufficiently complete, fully bear out this decreasing birth-rate correlated with the presence of Parish Relief on a Family Allowance basis. Burial figures as far as ascertained indicate the tendency to a rapidly decreasing death-rate also.

The only case in the above table (Nottinghamshire) in which an increased birth-rate is shown between 1811 and 1821 is also the only case in which industrialisation, and consequent importation of men and women at an age when they would be likely to be producing most children, can be indicated as a factor.

It may seem unsound to base so sweeping an assertion as ours on so slight statistical evidence. But such figures as have been collected certainly point to the hypothesis (1) that the rapid increase in population in the early years of the nineteenth century was due to a decreasing death-rate; and (2) that the Family Allowance scheme operating during a part of this period was a factor in decreasing the birth-rate. The first of these hypotheses has, we believe, been fully borne out by the investigation undertaken by Miss Buer and published in *Health, Wealth, and Population*. The second we hope to prove more fully by

further investigation into the birth-rates and death-rates of smaller groups whose concern with the Speenhamland system can be more accurately deliminated. We do not mean that a more accurate statement can be obtained by study of a small group where special factors may be operating than by study of a large one where these factors cancel out. But by totalling the results of the investigation for a large number of parishes of whose application of the system we have direct evidence, we shall be able more nearly to determine the exact influence of a flat rate allowance system on the birth-rate.

It will at that stage be easier to answer the objections of those who would account for the figures by reference to other factors. The most deadly alternative hypothesis that can be brought up is the charge of absolute unreliability of the figures. It may be said that while most people are buried, the number baptised may vary enormously from year to year, and no reliance can be placed upon a birth-rate compiled from baptism registers. In fact the birth-rate for 1821 as worked out from the sum of the estimated increase in the population for that year and the estimated number of deaths comes to 34·1 births per thousand persons living, showing a substantial increase, instead of a remarkable decrease on the 33·3 birth-rate given for 1811. But this result is vitiated if the 1811 birth-rate is worked out on the same basis, so that we have the following result.

BIRTH-RATES AND DEATH-RATES FOR ENGLAND AND WALES, 1811 AND 1821

Year.	Population.	Est. No. deaths.	Est. No. births.	Excess births.	Est. inc.	No. of Baptisms per 1000.	Corrected Births per 1000.
1811	10,150,615	203,000	333,995	130,995	182,826	33·3	38·1
1821	11,978,875	217,999	342,599	125,600	191,831	28·6	34·1

Further, a birth-rate worked out from the survival plus the death-rate has the demerit of being based on a too high figure for the deaths, thus making the 1811 rate much higher than seems in any way probable, while it does not take into account the possibility that a large percentage of the increase in the number of the population between 1811 and 1821 may have been due to immigration from Ireland. We agree then that our figures may be inaccurate, but we do not see a means of improving their accuracy, and, again, it will be far safer to

correct the baptism rate by an addition of survival and death-rates on the areas especially affected by Speenhamland, precisely those not likely to have been affected by Irish immigration.

For various reasons it would be useless to advance the suggestion that a decrease in the means of subsistence involving the substantial lowering of the labourers' standard of living was responsible for the decreased birth-rate. Firstly, this argument has for its basis the teleological view that population must restrict its numbers when the means of subsistence fail; while the period under consideration is one during which population is increasing at an unprecedented rate, and the new industrial appliances are increasing the means of subsistence. Secondly, an examination of differential birth-rates to-day shows a universal tendency to an increasing rate among those classes of workers whose standard is most depressed. We have no reason for supposing that under similar conditions of depression in a complex society there would be an opposing tendency to that observed, a tendency to restrict the family. Rather, we reiterate our own hypothesis. The tendencies stated as antitheses above may be synthesised by the conception that a low standard leads to an increased rather than a decreased birth-rate, but that under bad conditions a larger number of children die before they reach maturity. A decreased *survival* rate, therefore, results from a lowering of standards. Speenhamland applied the necessary panacea to inhibit the "natural" high death-rate among the numerous children of the depressed classes. It was, we believe, the larger numbers surviving, and not the larger numbers born, that was responsible for creating the impression among contemporaries that the labourer deliberately set out to increase his family in order to obtain an allowance for the extra children. For ourselves, the antithesis arises that statistics show an even smaller number of children being born, proportionately to the numbers of the population. If adequate analysis of the population into age-grades and sexes existed, it might be possible to show to what degree the lower birth-rate is due to a different composition of the population. If more children had survived in a previous decade, then the population will be largely composed of individuals who have not yet arrived at the age of puberty. At the same time, the decreasing death-rate may be supposed to have affected those who had passed the age at which procreation or child-birth was possible. Thus the corrected birth-rate (number of births per 1000 women between the ages of 15 and 55) would be necessary for a positive proof

of the nature of the influence of Family Allowances. But it would be impossible to get figures anything like detailed enough from the earlier censuses, for the purpose of compiling such a birth-rate even for the major divisions. Certainly it would be a hopeless undertaking for the small parishes. We must be content to counter the argument of the different composition of the population by referring once more to the factor of Irish immigration, which would redress the balance by bringing in a large proportion of young men and women.

If, then, inaccuracy, the influence of a depressed standard of life and the different composition of the population are not enough to explain away a positive decrease in the birth-rate, the only other relevant factor does seem to be a system of Family Allowances. It will follow from the rejection of other factors as fully explaining the figures, that the Speenhamland system of poor relief tended to produce a decreased birth-rate.

In what way this came about it is not incumbent upon the student of social fact as such to explain. One may, however, hazard a guess. Possibly, though no one suggests that the survival of former children decreases the probability of conception, yet it may be that after a certain number of children have survived, human beings even at a miserably low level are less keen to have more children, and will utilise whatever traditional or scientific means they have to prevent conception or procure abortion. If this were so, it would follow that any fall in the death-rate among infants and young children is likely to be correlated with a corresponding fall in the birth-rate. From modern figures that would seem to hold good; though it is generally maintained that they are related not as cause and effect, but as parallel effects of the same causal complex. The view that they are related as cause and effect, or at any rate that they interact on one another, is, however, tenable on the above hypothesis. It would then follow that the effect of Speenhamland on the birth-rate in the early years of the nineteenth century is only one example of a general law that any Family Allowance system makes for smaller families; that the effect of adequate public provision for children would not be an increase in the numbers to be provided for. Much more investigation would be necessary in order to establish this law; but the inferences which would follow are instructive. One of the arguments advanced by Miss O. Vlasto in the December 1926 number of the Economic Journal in support of a system of allowances differentiated according to income, is that the "eugenic re-

action " of a flat rate would be a positive inducement to larger families among the unskilled and lowest paid workers, and no inducement whatever to the more desirable elements of the population, the skilled workers, out of whose meagre surplus the scheme would be financed. One of the assumptions on which this argument appears to be based is that Family Allowance schemes as such tend to induce those benefited by them to have larger families. If the axe can be laid at the root of this assumption by showing that Family Allowances, even in the case of pauperised families, have the opposite tendency, a large part of Miss Vlasto's argument falls to the ground. The economic reactions of a flat rate may be a nearer approach to the levelling of incomes, but the eugenic reactions are more dubious. Fewer of the " low grade " children may be born. If more survive, they will be improved to the extent that environmental conditions are capable of improving human beings. There is, on the other hand, no reason for supposing that the artisan will be piqued into restricting his family if an attempt is made to lower his wages. From the past history of artisans and birth-rates, nothing of the kind would follow. Eugenically, an increase in his numbers, economically, increased resistance through the unions to any Family Allowance scheme, seem at least equally probable.

But apart from this special argumentation, the more cheerful prospect presents itself that there is no need to fear either prosperity for the broad masses of the people or a fairer distribution of income through some Family Endowment scheme, on the ground of their reactions qualitatively or quantitatively on the population, if it be true that increased care of children will be correlated with fewer of them. The new problem will be, how any better stock can be produced if it be true that evolution depends upon a selection of the most desirable variations in any one generation. A survival rate that rapidly comes to mean that 100 per cent. of those born reach maturity, must cut off any hope in that direction.

We conclude by reiterating the hypothetical nature of our present result in the attempt to formulate the relation between provision for children by someone not responsible for their birth and the numbers born. Not only is a more detailed investigation into the effects of Speenhamland necessary to support our hypothesis; inquiries into other allowance schemes, such as those in operation now on the Continent, in Australia, among certain sections of the population in England, where relevant

vital statistics are available, is essential. In these modern cases more accurate and more detailed figures should be obtainable from which more certain deductions can be drawn. It may be possible to find whether any movements in the birth-rate are correlated with alterations in the scale of Family Allowances, and to see, also, if any public health schemes or maternal welfare clinics associated with such systems have a bearing on the numbers born during their operation. Better control groups could also be taken. When this has been done we shall be in a position to meet criticism with facts. At present we can only urge that nothing has been produced to show that Family Allowances are correlated with an increasing birth-rate, that our figures so far as they go are most simply explained by the hypothesis that a Family Allowance scheme results in a decreased birth-rate.

J. S. Blackmore
F. C. Mellonie

THE COMBINATION LAWS RECONSIDERED

In a recent article it has been asserted that the Combination Acts of 1799 and 1800 were "the first legal enactments against the right of working men to combine for an increase of wages or a reduction of working hours." [1] This is contradicted not only by the Statute Book, but by Mr. and Mrs. Webb, and by itself would need no comment. But Mr. and Mrs. Webb themselves speak of "the far-reaching change of policy marked by the severe Acts of 1799–1800," [2] and Mr. and Mrs. Hammond say 'the Combination Laws lasted for a quarter of a century, and during that time the workpeople were at the mercy of their masters." [3] Combination laws of course date from a much earlier period, and there is much evidence that the legislation of 1799–1800 represented no change of policy, and that its effect has been greatly over-estimated.

The chief authority for the effects of the Combination Laws (there were some thirty or forty of them, including Scottish and Irish Acts) is the evidence given to the parliamentary Committee on Artisans and Machinery in 1824. This evidence was carefully arranged by Francis Place to show that the laws were oppressive, that they were not only ineffective in preventing combinations but did in fact encourage them, and further, that if the laws were repealed, strikes would cease. The witnesses were chosen to represent different trades and localities and instructed "to state the evils of the Combination Laws." The case against them was thus fully stated; nevertheless it appears from the evidence that the Act of 1800 (which replaced that of 1799) was by itself a negligible instrument of oppression.

This was also the opinion of George White, the parliamentary agent who drafted the repealing Act of 1824 and was clerk to the Committee on Artisans and Machinery, and who, according to himself, had made the laws relating to masters and workpeople

[1] Judge Atherley Jones, *Fortnightly Review*, December 1926.

[2] *History of Trade Unionism*, ed. of 1919, p. 64.

[3] *The Town Labourer*, ed. of 1925, p. 129. Mr. and Mrs. Hammond mention the earlier Statutes but say (following Mr. and Mrs. Webb) that "before the famous legislation of 1799–1800, the State forbade combination, not as infringing the freedom of employers, but as infringing its own authority." *Op. cit.* p. 112.

" his particular study for twenty years." [1] He considered the chief mill-stone round the neck of the worker to be the thirteenth clause of the Act of 5 Elizabeth, c. 4 (the Statute of Artificers): " persons who shall undertake to make any ship, house or mill or any work taken by the gross or piece and shall depart before finishing, unless for non-payment of wages, shall be imprisoned one month and fined £5." (This is not a quite correct citation of the Act, which does not impose a fine but allows the master to bring an action for £5 damages in addition to other costs and damages.) " This clause," say White and his collaborator (apparently Gravenor Henson, the framework knitter), " has been much abused, as in many businesses they never finish their work . . . therefore if any dispute ariseth respecting the amount of wages, and a strike or turn-out commences, and men leave their work, having words, the master prosecutes them for leaving their work unfinished. Very few prosecutions have been made to effect under the Combination Acts, but hundreds have been made under this law, and the labourer can never be free unless this law is modified; the combination is nothing; it is the law which regards the finishing of work, which masters employ to harass and keep down the wages of their workpeople; unless this is modified, nothing is done, and by repealing the Combination Acts you leave the workman in ninety-nine cases in every hundred in the place where you found him—at the mercy of his master." [2]

He is not entirely consistent on the Act of 1800, however, for though he says that " it has been in general a dead letter upon those trades upon whom it was intended to have an effect; namely, the shoe-makers, printers, paper-makers, ship-builders, tailors, etc.," he adds that " it has been extensively felt in general local manufacturing trades." As proof of this he instances the case of the stocking-weavers of Nottingham (actually Leicestershire), an episode related at greater length in the evidence to the Committee of 1824. They were in great poverty owing to reductions in rates of pay since 1815. The workers' committee drew up a list of piece-rates, and there had been strikes to enforce it in 1817, 1819 and 1821. The men were supported by public opinion, by some of the masters, and by many local notables, including the lord

[1] G. White, *A Digest of all the Laws respecting Masters and Workpeople*, 1825 (in Add. MSS. 27804), dedication to Peel. This pamphlet repeats verbatim much of an earlier one referred to in the note below.

[2] *A Few Remarks on the State of the Laws . . . regulating Masters and Workpeople, intended as a Guide for the Consideration of the House in their Discussions of the Bill for repealing the Acts relating to Combinations of Workmen.* Printed for the Authors. (Presentation copy from White to Place in Add. MSS. 27804.)

lieutenant of the county, who subscribed to their funds. However, after the third strike the workers' committee were prosecuted under the Combination Act, four were convicted, they appealed, and the conviction was quashed at the Sessions. The prosecution was a monstrous one, but it certainly does not show that the Act had any very great effect.

The evidence of the inquiry as a whole is equally negative on the results of the Act of 1800. There was occasional confusion among the witnesses as to the Acts under which prosecutions had been made—whether for combination, conspiracy, riot, assault, breach of contract or leaving work unfinished. Mr. and Mrs. Hammond instance three cases from the *Minutes of Evidence* of convictions under the Act of 1800. One of these appears to be a conviction for leaving work unfinished, though the witness, a Stockport weaver, thought it was " under the Combination Laws." Four of the convictions mentioned by witnesses seem to have been under the Act of 1800, and one of these was confirmed by the Sessions on appeal. There were also three convictions quashed on appeal, including a case at Sheffield, where the men who opened negotiations after a strike of ten weeks were charged with combination " for treating for others than themselves." The sentence was reversed at the Sessions when the men showed that the masters had agreed to combine not to raise wages.[1] There was also an incident which shows considerable lack of familiarity with the Act of 1800. Some master linen-weavers of Knaresborough, after a twenty-eight weeks' strike in 1823, published an abstract of the Act of 1799 (repealed in 1800) to induce the men to return to work.

But what the inquiry does show is that the Act of 1800 was a far less potent instrument of oppression than a prosecution for conspiracy at common law. This had been the general procedure before 1799, even in trades regulated by special Acts forbidding combination, and continued to be so after the legislation of 1799–1800. For instance, the prosecution of *The Times* compositors in 1810 which started Place on his campaign against the Combination Laws, was under an indictment for conspiracy, sentences of from nine months to two years' imprisonment being given.

Under the Combination Act the maximum sentence was three months' imprisonment, but this limitation does not seem to be the chief reason why successful prosecutions under the Act were, as White said, " very few." Mr. and Mrs. Hammond have shown that the Act of 1799 was the indirect result of a petition from

[1] File-makers. Evidence of Bullock.

the master millwrights for leave to bring in a Bill for the better preventing of unlawful combinations of workmen employed in the millwright business, on the plea "that the only method of punishing such delinquents under the existing laws is by preferring an indictment, at the [next] Sessions or Assizes after the commission of the offence, but, before that time the offenders frequently remove into different parts of the country. . . ." Since at least the middle of the eighteenth century there had been a movement for the extension of summary prosecution before Justices of the Peace for petty offences to prevent the delay and expense of indictments at the Sessions or Assizes, which led to reluctance to prosecute, and, if bail was not forthcoming, to considerable terms of imprisonment while the accused were waiting for trial. It was on these grounds that Henry Fielding had suggested that petty larceny should be made a summary offence, instead of only an indictable one. Thus, it was hoped, punishment would become lighter, since the sentences were limited, but more certain. Summary procedure was also increasingly used for a number of new offences, such as dog-stealing, offences under the Acts for protecting chimney-sweepers and coal-heavers, and under the new paving Acts. Each Act of this sort (if debated) was inevitably opposed as trenching on trial by jury and the liberty of the subject, but, as a matter of fact, the intention of the Acts was largely defeated by appeals to the Sessions (often in a distant part of the county) and the frequent quashing of convictions on technical points. A number of Acts consequently became dead letters or nearly so. In many cases this was regrettable; in the case of the Combination Act, the discouragement of prosecutions was doubtless a good thing, as the occasions when the masters were thrown back on the common law with its severer penalties were probably few compared with those when no prosecution was attempted.

This attitude towards summary prosecutions is of considerable importance in the understanding of the social history of the period, and not least in the case of the Combination Act. It was the subject of a bitter complaint by a London police magistrate in 1821: "It is not, I believe, generally known that informations before magistrates must be drawn up with exactly the same care and nicety as indictments in courts of law; with this extra inconvenience that, in nineteen out of twenty cases, an appeal from the conviction is permitted to the Quarter Sessions, and that without the appellant being obliged to allege any reason whatever; the consequence is, that a vast number of informations,

substantially founded in justice, fail before the magistrate; and of those which do not, a great many more are quashed on appeal at the Quarter Sessions. . . . I must not forget too the gross absurdity of legislating to stop an offence of every day's occurrence, by what is humorously called a summary remedy before the magistrate; clothing it, at the same time, with all the difficulty, delay and expense of a suit at law." [1]

He might have added that a conviction confirmed at the Sessions ran considerable risk of reversion in the King's Bench, and further, that what was difficult for a metropolitan police magistrate and his skilled clerks was far more so for a country justice. The attitude of the King's Bench towards justices' convictions was laid down in a number of leading cases. "A tight hand ought to be held over these summary convictions," the judges declared in quashing a conviction for stealing fish, because "it did not appear on the conviction that the fishing was without the consent of the owner," who was, presumably, the prosecutor.[2] Another leading decision was the quashing of a conviction for profane cursing and swearing (fifty-four oaths and a hundred and sixty curses, each one punished by a fine) because the actual imprecations uttered were not specified in the conviction.[3]

A very interesting case in 1805 on the Combination Act of 1800 shows that this Act was, in fact, interpreted with much strictness. Some cotton-spinners had been sentenced by two justices to three months' imprisonment for being "unlawfully concerned in the making and entering into a certain *agreement for the purpose of* then and there *controlling* W. Borradaile, etc., then and there carrying on the manufacture and trade of cotton-spinning . . . the said agreement not being a contract between any master and journeyman or manufacturer, for or on account of the work or service of such journeyman or manufacturer; contrary to the Statute of 39 and 40 Geo. III entitled, etc." The conviction had been confirmed at the Sessions and the men had then appealed to the King's Bench. It was evidently considered an important case, as Erskine had been briefed for the appellants, together with Garrow, Yates, Fergusson and Hardy. Erskine argued "that all the policy and convenience of the law and the weight of precedents . . . are against this general form

[1] L. B. Allen, *Brief Considerations on the Present State of the Police of the Metropolis*, 1821, p. 44.

[2] R. *v.* Corder: Burrow, iv. p. 2279 (1769).

[3] R. *v.* Sparling: Strange, i. p. 497 (1722).

of conviction. . . . That the wholesome rule of law . . . is even more necessary to be observed in convictions before inferior courts than before the higher tribunals; namely, that every indictment should contain a charge of the offence with such certainty that the offence is plainly brought within the law which is alleged to have been broken."

All the judges concurred that the conviction was bad and should be quashed. Ellenborough in giving judgment said, "In all instances where jurisdiction is given to inferior magistrates . . . it is necessary that the Court should see that they do not exceed that jurisdiction. The Statute in question gives the magistrates a summary jurisdiction to repress agreements by journeymen *for controlling* their masters in their trade; they should therefore have stated what that agreeent was, in order that the Court might see whether it were an agreement within the meaning of the Act. . . . And it is necessary to prove the criminal object as well as the criminal intent. . . . It is not enough that the agreement should be *for the purpose* of controlling, but it must be entered into for *controlling*, that is, for effecting that object, and I cannot say that this was such an agreement without seeing what it was." [1]

To the lay mind the distinction between "for the purpose of controlling" and "for controlling" is obscure, and that between "criminal object" and "criminal intent" decidedly subtle, and justices who were neither Shallows nor Silences might well have quailed at having to give a decision on the Act. Burn's *Justice* is singularly unhelpful, merely giving the following form of conviction: "A. B. is convicted before us . . . of having [state the offence] contrary to the Statute . . ." This is simply the schedule to the Act, of which a manual of Sessions Law says that it "exhibits one of those instances . . . where a general form of conviction is prescribed by the Act itself, but in such loose, general and imperfect terms, that much addition is requisite in order to bring the offence within the provisions of it." [2]

By far the most important clause in Hume's repealing Act of 1824 was the one enacting "that journeymen, workmen or other persons who shall enter into any combination to obtain an advance or to fix the rate of wages, or to lessen or alter the quantity of work, or to induce another to depart from his service before the end of the time or term for which he is hired, or to quit or return to his work before the same shall be finished . . . shall not be liable to any indictment or prosecution for conspiracy, or to any

[1] R. *v.* Nield and seven others: East, vi. p. 417 ff., May 22, 1805.

[2] W. Dickinson, *A Practical Guide to the Quarter Sessions*, 2nd ed. 1820, p. 283.

other criminal information or punishment whatever under the common law or the statute law." The mere repeal of the Act of 1800 would have left things much as they were.

The Spitalfields weavers, who before the Spitalfields Act of 1773 had had an extensive experience of combinations, strikes and prosecutions, were of this opinion. When the outburst of strikes and violence which followed the repealing Act of 1824 led to a proposal to revive combination as a common law offence, they petitioned Parliament against it, on the ground that "the old practice of indictment for conspiracy will be again revived, and workmen will in a short time be more oppressed and degraded than they were under the old laws against combinations of workmen." [1] The old practice had never been given up, but there had been peace in Spitalfields since 1773.

Mr. and Mrs. Webb regard prosecutions of workmen for conspiracy as a new development in the later eighteenth century: "Already in 1786 the law of conspiracy had been strained to convict, and to punish with two years' imprisonment, the five London bookbinders who were leading a strike to reduce hours from twelve to eleven." The interpretation of conspiracy was admittedly extended in the eighteenth century,[2] but the extension to strikes of workmen (if it was an extension) took place in 1721, and prosecutions of this sort were common many years before 1786. In 1761 the *London Chronicle* records that "a number of bills of indictment were preferred and found before the Grand Inquest against the rebellious journeymen cabinet-makers who have lately combined together to raise their wages and lessen their hours of working, etc." [3] Although the London tailors were regulated by an Act fixing wages and forbidding combinations, in 1765 and again in 1770 a number of tailors were indicted for conspiracy at the Old Bailey, not prosecuted under the Tailors' Act. The leading case on such indictments for conspiracy is that of the tailors of Cambridge in 1721. Mr. and Mrs. Webb say, following Wright's *Law of Criminal Conspiracies*, that it is uncertain under what law the men were convicted. But the case itself states explicitly that the men were convicted on the common law,

[1] *Spitalfields Weavers' Petition*, July 4, 1825. Add. MSS. 27802, fo. 48 ff.

[2] See Ellenborough's judgment in R. *v.* Turner and eleven others, 1811, commenting on Lord Mansfield's decision in Eccles's case (1783), which "was considered a conspiracy in restraint of trade, and so far a conspiracy to do an unlawful act affecting the public. But I should be sorry that the cases of conspiracy against individuals, which have gone far enough, should be pushed still further." The case in question was that of a party of men who had gone armed to snare hares.

[3] December 12, 1761.

and it is cited without question in precedent books and manuals, as well as in the Law Reports, as the authority for such prosecutions.[1]

In 1721 some tailors were indicted at the Cambridge Quarter Sessions for conspiracy to raise their wages. They appealed to the King's Bench, alleging a series of errors in the indictment. All but two of these were merely technical, they had been styled yeomen as well as tailors, the words *domini regis* had been omitted after *pacis*. The third count was that there was no crime on the face of the indictment, for it only charges them with a conspiracy and refusal to work at so much *per diem*, whereas they were not obliged to work at all but by the year by 5 Eliz. c. 4. The Court found that the refusal to work was not the crime, but the conspiracy to raise wages: "it is not for refusing to work but for conspiring that they were indicted, and a conspiracy of any kind is illegal, although the matter about which they conspired might have been lawful for them or any of them to do, if they had not conspired to do it." The final plea was that the indictment did not conclude *contra formam statuti*, "for by the late Statute 7 Geo. c. 13, journeymen taylors are prohibited to enter into any combinations for advancing their wages, etc., and the Statute of 2 and 3 Edward VI makes such persons criminals." The answer to this was, "the indictment need not conclude *contra formam statuti* because it is for a conspiracy, which is an offence at common law." Wright cast doubt on this case as badly reported, because the Act of 7 Geo. I was not relevant, since it applied only to London tailors. But the fact that two statutes are cited in the report is explained in a note to be "because this case was twice argued, and here the two arguments are blended."[2] The appellants' counsel had on one occasion brought forward an irrelevant Statute.

Similarly, Lord Mansfield said in 1783, in connection with the indictment of some master tailors for conspiring to impoverish and prevent the prosecutor, another master tailor, from trading, "the illegal combination is the gist of the offence. Persons in possession of any articles of trade may sell them at such prices as they individually may please, but if they confederate and agree not to sell them under certain prices, it is a conspiracy; so everyone may work at what price he pleases, but a combination not to work under certain prices in an indictable offence."[3] If this was a new

[1] *E.g.* Bird, *Law of Master and Servant*, 1795; W. Dickinson, *op. cit.*; Chitty, *Practical Treatise on the Criminal Law*, 1816.

[2] 8 *Modern*, p. 11 ff. [3] Cited by Wright, *op. cit.* (Eccles Case).

interpretation of the law of conspiracy it was based on the very old principle that combinations in restraint of trade were illegal, and there were, in fact, some very ancient precedents for it, though how far they were relevant in law is not for a lay person to discuss.

Combinations to raise the price of commodities were regarded in the same light as combinations to raise the price of labour. In 1773 the Government was disturbed at a report that the Westminster publicans had agreed to raise the price of beer, a step which might lead to riots. A letter was at once written to Sir John Fielding asking him " to discover the most active persons in this oppressive measure," as " it is become a matter for consideration how far it may be expedient to institute a criminal prosecution . . . as for a conspiracy to raise the price of provisions." [1] The justices induced the publicans not to alter the price of beer and a prosecution was not necessary. But Chitty gives a precedent of an Information in the Crown Office (thus eliminating the grand jury) against thirteen Southwark salt merchants for conspiring to raise the price of salt.[2]

It is generally said that although under the Act of 1800 masters were equally punishable for combinations, proceedings were, in fact, never taken. Clearly, whatever the letter of the law, masters were protected against legal proceedings in a variety of ways. Nevertheless, one witness in 1824 knew of two prosecutions of masters under the Act, both at London police offices. One was stifled, the result of the other he did not know. Masters were certainly indicted for conspiracy. Chitty gives as a precedent the text of an indictment of master rope-makers by journeymen for conspiring to prevent the employment of the prosecutors and others without the consent of their last masters.[3] In Dickinson's *Law of Quarter Sessions* (1820) there is an indictment of master shoe-makers for the same offence. It cannot be supposed that these two cases were the only ones of their kind; indeed, Dickinson expressly states that the types of conspiracy at common law are so varied and numerous that he gives precedents of such cases only as are " most generally useful at country Sessions." [4]

These cases show that the law was consistent in regarding combinations in restraint of trade illegal, and rendering those who combined to raise the price of goods or labour or to prevent any man from carrying on his work liable to an indictment for conspiracy. It is also clear that simple association was not regarded as com-

[1] *State Papers Domestic, Entry Book*, 141.
[2] *Practical Treatise on the Criminal Law*, 1816, iii. p. 1163.
[3] *Op. cit.*, p. 1169.
[4] *Op. cit.*, pp. 279 and 283.

bination. Indeed, in common parlance, as well as in law, combination and conspiracy were once equivalent terms. The N.E.D. records that Captain Smith in his *History of Virginia* (1614) wrote : " they by a general combination in one day plotted to subvert the whole colony." Pepys spoke of "some few that do keep out of all plots and combinations." " When bad men combine, good men must associate," wrote Burke. Even in Adam Smith's famous passage the word combination could probably be replaced by conspiracy with little alteration to his meaning (" Masters are always in a sort of tacit *conspiracy* not to raise the wages of labour . . ."); he writes elsewhere in the *Wealth of Nations* " Were the Americans, either by combination or any other sort of violence, to stop the importation of European manufactures . . ." The common form of an indictment for conspiracy ran with legal redundancy, " for conspiring, combining, confederating and agreeing . . ." confederacy and conspiracy having the same meaning in early law.[1]

The history of prosecutions for combination in England is a long one and does not begin with the tailors of Cambridge. In 1339 five London carpenters were charged before the Mayor, Sheriffs and Aldermen with making a confederacy among men of their trade to prevent foreign carpenters (men not free of the City) from accepting less than sixpence a day, and with having beaten and maimed John de Chalfhonte, who had taken service for less. A jury found that they had not beaten John, but had intimidated men from taking less than sixpence a day and an after-dinner drink.[2] Confederacies of London carpenters seem to have existed for some time, as in 1299 a carpenter was charged with gathering together a parliament of carpenters at Mile End, where they bound themselves by a corporal oath not to observe an ordinance by the Mayor and Aldermen touching their craft and their daily wages.[3] Such ordinances could be decidedly oppressive, as appears from one made for bakers' servants in 1349 at the request of their masters. This was after a number of bakers' servants had been indicted for a conspiracy not to work except at double and treble the wages formerly given.[4] It is to be noted that this was after the Black Death and immediately after the first ordinance of labourers, yet the men were not prosecuted under the ordinance for asking excessive wages but indicted for

[1] *Termes de la Ley*, 1641.

[2] *Plea and Memoranda Rolls of the City of London*, ed. A. H. Thomas, 1926, p. 108.

[3] *Calendar of Early Mayors' Court Rolls*, ed. A. H. Thomas, 1924, p. 25. *Plea and Memoranda Rolls* . . . pp. 225–6.

conspiracy. Among other cases in the same year an interesting one is that of some cordwainers who brought a bill of complaint against a number of their servants for entering into a conspiracy not to serve them except by the day and on their own terms, in contravention of the masters' right to rule the trade. The servants who were in court all confessed and threw themselves on the mercy of the Mayor and Aldermen, and in answer to questions gave the names of several others who had joined their confederacy, and though they did not know the names of all, said that the total number was over sixty.[1]

Combinations to raise the price of commodities were, then as later, also the subject of prosecutions. In 1298 some London coopers were summoned at the instance of another cooper for contempt of the King and Mayor, in making an ordinance "against the dignity of the Crown and to the grave danger of the Commonwealth," that no one should sell a hoop formerly sold at a halfpenny and three farthings for less than a penny and other hoops in proportion, under a penalty.[2]

Combinations to raise the prices of food or labour became a statutory offence by the Act of 2 and 3 Edward VI, c. 15, called "A Bill of Conspiracies of Victuallers and Craftsmen," repealed with other Combination Acts in 1824. Chitty says that by adding the words "against the form of the statute" to an indictment for conspiracy the indictment will be upon this Statute instead of at common law, but common law prosecutions seem to have been general.

It is unlikely that the tailors of Cambridge were the first workers to be indicted for conspiracy at Quarter Sessions, though they may well have been the first to appeal against their conviction. Mr. Heaton[3] has shown from the West Riding Sessions Records that in the early eighteenth century the magistrates dealt rigorously with combinations for higher wages, and cites as one out of a number of cases, that of six cloth drawers who combined not to work for less than three-halfpence an hour instead of the current penny, and were summoned for the conspiracy to the Leeds Quarter Sessions in 1706 and heavily fined.

If such sentences were rare there is an obvious explanation for it. So long as even the wages clause of the Statute of Artificers was enforced, strikes and combinations would have been almost impossible. As Mr. Heaton says, "the fine which hung over

[1] *Plea and Memoranda Rolls . . .* p. 231.

[2] *Calendar of Early Mayors' Court Rolls*, pp. 1, 2.

[3] "The Assessment of Wages in the West Riding of Yorkshire in the Seventeenth and Eighteenth Centuries," ECONOMIC JOURNAL, XXIV. p. 210 ff.

master and servant alike would be sufficient to deter men from making any general or concerted demand for increased rates of payment." The Act not only penalised the giving or taking of wages above a maximum fixed by the justices (there was no minimum), but said that contracts of work were to be by the year, forbade the leaving of work unfinished under a penalty (" Servants unduly departing from work or refusing to serve shall be imprisoned until they undertake to complete their service "), and enforced a leaving testimonial signed by the head officer of the town or township or two householders. Those who could not produce such testimonials were to be imprisoned and whipped as vagrants.

Many of the clauses of the Act were in fact obsolete. Brown, who republished Lambard's book on the constable in 1677 with additions, deplores that the leaving testimonial had become obsolete, though " the penalty for the same be strict and severe." By the last decade of the seventeenth century the fixing of wages by justices seems to have become a mere form. Roger North accounts for this in a very interesting passage. " All ages have been possessed with that shallow mistake, concerning laws, that punishments will regulate. I have treated of this already and here only take up one instance. . . . And that is the Statute of Labourers (5 Eliz. c. 4, 1 Jac. 6). It was thought by the means of those laws that the price of work might be kept to a due station, proportionable to the prices of provisions. And to make sure of this (in their conceit), the execution of these statutes was intrusted with the gentlemen of the country who were justices and interested to lower prices of work. . . . : And ever since 1 Jac. the Sessions of Peace, in many places, have set the rate of work. And the justices who employ servants and labourers have done all that in them lay to hold the country to them; but in vain, as all know by experience. And the poor laugh at them, and cry *Statute Work against Statute Wages:* For laws will not make nor influence prices in open market; and they admit no reglement but that of men's occasions and desires." [1]

[1] *A Discourse of the Poor* (published 1753, but written when 3 and 4 Wm. and Mary was the last Act on the settlement of the poor), p. 64. The justices, however, in many places continued to make the usual annual proclamation of wage rates, or rather to confirm the old rates, as a mere formality, presumably because there was a penalty of £10 on each justice for neglecting to do so. The lists continued in some places to be reprinted even in the early nineteenth century, but the rates had no relation to actual wages, and no attempt was made to enforce them. Mr. Heaton thinks rates were enforced in Yorkshire up to about 1730, because after that they ceased to be reprinted but were merely confirmed. *Op. cit.*

Although many of the clauses of the famous Statute were obsolete by the end of the eighteenth century, it was still recognised as the foundation of the law of master and servant, and the clause penalising the leaving of work unfinished was, White tells us, ninety-nine times more oppressive in practice than the Combination Acts. That its intention had been repressive appears from an interesting paper in the Hatfield MSS. of *Considerations delivered to the Parliament*, 1559, in which the genesis of the Act is clearly to be traced. The note under the heading " Labourers and Servants " runs : " That the Statutes 12 Richard II, chap. iii, ' that no servant or labourer at the end of his term depart out of the hundred or place where he dwells,' etc., and 13 Richard II, chap. viii, ordering the justices at every session to appoint by proclamation the wages of workers, etc., be confirmed with the addition ' that no man hereafter receive into service any servant without a testimonial from the master last dwelt with, . . . witnessing he left with free licence of his master : penalty 10*l.*' So by the hand of the masters, servants may be reduced to obedience which shall induce obedience to the Prince and to God also." [1]

How far does the legislation of 1799–1800 constitute a new departure ? It was clearly not a new departure in spirit. Until this time eighteenth-century English Statutes against combinations had been concerned with particular trades only, but this was the natural result of the prevalent system of legislation by private-bill procedure on petition from the parties interested. Except for the apparently casual intervention of Wilberforce, supported by Pitt, the Act of 1799 would have applied to millwrights only. Those who spoke most strongly against it did so on the ground of its obvious defects in the loose definition of combination and the powers given to a single justice, maintaining that the existing Statutes were sufficient. Sheridan himself, who spoke, as on other occasions, without having read his brief (wrongly supposing the Act to be one to explain and amend other Acts) said, " its repeal will not be the means of letting the subject loose from the restraint of law, but will merely restore things to their former state, and give operation to laws which experience has proved to be perfectly adequate. . . ." [2] No opposition appears to have been made to the Act of 1800 which altered the objectionable provisions in the former Act. This Act merely added one more

[1] Printed in *Tudor Economic Documents*, ed. R. H. Tawney and E. Power, i. p. 325.

[2] *Parliamentary Register*, June 30, 1800.

to the many existing Statutes; and was found in practice so ineffective that it was seldom resorted to with effect.

It is certainly not distinguished from earlier laws by its severity, since penalties under the Act were limited to two months' imprisonment with hard labour or three without. The Act for the woollen trade (12 Geo. I. c. 34), that is, for weavers, wool-combers and framework knitters, had made it felony to assault or threaten masters for not submitting to "illegal by-laws and ordinances," and felony without benefit of clergy to break into a house or shop to destroy work. This was extended in 1749 to other textile trades—linen, hemp, flax, cotton and fustian, and to hatters, dyers and hot-pressers. In 1766, after an outbreak of violence in Spitalfields, it was extended to silk. These Acts were not at first dead letters, though their severity led to their disuse. Adam Smith said workmen in their combinations "always have recourse to the most shocking outrage and violence." In 1768 two Spitalfields weavers were executed for cutting silk in the loom.

If "the first twenty years of the nineteenth century witnessed a legal persecution of trade unionists as rebels and revolutionists," [1] this was certainly not due to the legislation of 1799–1800 or to any recent change in the attitude of the judges. Much more research into the earlier history of industrial disputes is necessary before it can be assumed that the turn of the century witnessed any such change. But if it did, then the instances of compromise and tolerance, good sense and moderation, to be found even in the evidence given to the Committee of 1824 are the more remarkable. Mr. and Mrs. Webb conclude from White's remark that the law of 1800 had remained almost a dead letter on the trades for which it was intended, how "lax was the administration of the law," a phrase which from anyone but the chief authorities on the administrative methods of the period might seem to imply the existence of some machinery of control and inspection on modern lines. If the law was not enforced, the reason, of course, was that the masters did not choose to take legal proceedings either because the men's organisation was too strong for them, or because they did not care to risk the expense and uncertainty of the law, or because they did not wish to provoke ill-feeling. All these motives are to be found in the evidence of 1824. Place stated that trade clubs and successful strikes during the war period had been the chief means of the rise in wages in London trades.[2] These were trades in which the Acts against combina-

[1] S. and B. Webb, *op. cit.*, p. 63.

[2] *Trade Clubs, Strikes and Wages* (1834), Add. MSS. 27834.

tion had been admittedly inoperative. It was not only the strongly organised trades which had this immunity from prosecution, as, for instance, the Manchester engineers who controlled the supply of labour and regulated the admission of apprentices without opposition from the masters, because, as one said, "it is better not to contend with them, for they turn out and we lose our time." No workers were in a worse position than the hand-loom weavers, yet it was a Leeds woollen weaver who told the Committee that owing to a strike in 1819 conducted by the men's union, their wages had been raised and that the demands of the union for higher wages had never led to a prosecution: "the reason we are not punished is, because the magistrates in our neighbourhood do not like to put the laws in execution when they know or conceive that our demands are reasonable," and they recommended the parties to agree.[1] Strikes among cotton-spinners were frequent, yet it was a Stockport journeyman cotton-spinner who said that after a six-weeks strike of jenny-spinners (about 800) in 1818, there had been an amicable agreement to "split the difference," and "masters and men have since been more comfortable than ever they were before." [2]

If the Committee of 1824, the evidence for which had been staged by Place to show "the evils of the Combination Laws," could elicit these instances of moderation, one may be sure that up and down the country there were many others. The surprising thing seems to be that restrictions on combination were removed so much earlier in this country than in any other, and that the removal should have been substantially maintained even after the outburst of strikes and violence which followed the repealing Act of 1824. If the evils of the laws were largely psychological, they were none the less potent for that. It is a strange paradox that the laws which had been based on the ancient English doctrine that the restraint of trade is illegal should have been repealed in obedience to the full-fledged individualism of *laissez-faire*, and that now again, when the *laissez-faire* of the early nineteenth century is the most discredited of doctrines, the demand for some restriction of trade union activities should derive, ostensibly at least, from their interference with individual liberty.

M. DOROTHY GEORGE.

[1] *Minutes of Evidence*, p. 561. [2] *Ibid.*, p. 431.

THE LONDON COAL-HEAVERS: ATTEMPTS TO REGULATE WATERSIDE LABOUR IN THE EIGHTEENTH AND NINETEENTH CENTURIES

The London coal-heavers are an interesting example of a body of labourers whose organisation and aims remained curiously constant from the beginning of the eighteenth century (and probably earlier) till the middle of the nineteenth. Their attempts to obtain protection from Parliament illustrate the methods of industrial legislation of the period and the complications arising from administrative shortcomings. Their work was to unload the coal-ships as they lay in the Pool into lighters or barges. They worked in gangs, and the work, which was very heavy, could not be done by inexperienced men. This was more especially the case before the method of coal-whipping was introduced about 1758. Before this, the men worked in gangs of from fifteen to seventeen under a leader or foreman called a market-man, and raised the coals from the hold of the ship by shovels from stage to stage on a series of platforms. About 1758 the method of whipping was introduced,[1] that is, filling a basket or hod which was jerked or whipped by a pulley on to the deck, where it was measured by one of the City meter-men and emptied out into the barge. The coal-whippers worked in gangs of nine, ten or eleven (afterwards fixed at nine) under a foreman called a basket-man, who received and emptied the basket. In 1769 it was estimated that a third of the coal in the Port of London was unloaded by whipping, the rest by the older method, and the word coal-heaver then applied also to the whipper. Gradually the older process ceased to be used and the men were known as coal-whippers. The change in name (in official documents) took place between 1807 and 1830, by which time at least coal-heaving may be supposed to have died out. The coal-whippers in the nineteen-forties were able to describe the then obsolete method to Mayhew.

The ideal of the coal-heavers was to be a privileged body, limited in number, under civic control, with fixed rates of pay out of which a fund should be raised for sickness and old age and for

[1] *The Case of the Coal-Heavers respecting the Undertakers . . .* [1769]. In 1757, however, coal was said to be "unloaded by baskets" when coal-heavers were scarce. *Commons Journals*, 28th April, 1757.

their widows and orphans. This was the position of the Fellowship of Billingsgate Porters, whose work was to unload corn, salt and other measurable commodities on the quays and wharves within the City. These porters had once unloaded coal too,[1] but at some time between the reign of Elizabeth and the end of the seventeenth century the growth of trade and its extension beyond the City limits had caused coal to be taken over by a body of men known as coal-heavers, who lived chiefly in Wapping and Shadwell and were not free of the City. The coal-heavers were aware of this evolution in their calling and aimed at conditions as much like those of the Fellowship Porters as possible.

> "As the Fellowship Porters," runs a petition of 1764, "were, by the increase of trade, much employed in several other branches of labour, which were more agreeable to them than the slavish and dirty part of the work . . . they, by degrees, forbore to have any further concern therein; and, at length, gave it up. Since which time, others took up that laborious employment, who, soon after . . . were, and still are, called and known by the name of coal-heavers, who, not being Freemen of London, became a distinct and separate body. . . ." [2]

The earlier efforts of the coal-heavers were directed towards becoming a fellowship or a corporation. In 1699 they petitioned the House of Commons for a Bill "to establish them a fellowship under such government and rules as shall be thought meet after the manner of the Watermen, Carmen, Porters and Coachmen." [3] Nothing came of this, and in 1708 they petitioned the Queen for a charter of incorporation. The petition was referred to "the Lord Mayor and Court of Aldermen and to any other body of men that may be affected by such a grant." [4] Such a reference could have only one result; the City was opposed to the incorporation of journeymen or labourers, and the coal-trading interest would certainly not regard it with favour.

But regulation of some kind was urgently needed. The work was irregular to an extreme degree. In spite of attempts to space out the sailing of ships from the Tyne at regular intervals, contrary winds often kept them from sailing till a number had

[1] In 1589 each member of the fellowship was required to carry two turns every week in corn, salt or sea-coals, which would amount to a penny a week, for the relief of the lame, sick or impotent. Unwin, *The Guilds and Companies of London*, p. 362.

[2] *The Coal-heavers' Case* [1764].

[3] Unwin, *op. cit.*, quoting *Commons Journals*, xiii. p. 99, a reference I have been unable to trace.

[4] *S. P. Dom., Entry Book*, 106, p. 360.

accumulated. Gales from the south-west sometimes forced them to take shelter in Yarmouth Roads, while an east wind would prevent their sailing up the Thames till a sudden change filled the Pool with coal-ships. In 1768 it was said that if the ships were able to sail regularly and arrive according to plan, the number of coal-heavers was excessive. When there was a glut of ships unloading was much delayed for want of hands, and there were times when for weeks on end only a few of the men were employed.[1]

As a result the fluctuations in wages were extreme. They varied from day to day and even from hour to hour. The men were paid at a rate of so much a head for unloading a score (twenty London chaldrons) of coals. In 1757 the rate varied from 1*s.* to 2*s.* 6*d.* or 2*s.* 9*d.* a score. According to the books of a firm of coal-factors the highest rate in 1756 was 3*s.* (on four days in September), the lowest 1*s.* (on one day in February).[2] But in 1768 anything over 1*s.* 6*d.* was held to be excessive, and at this time rates of 2*s.* and over were evidently exceptional. In spite of fluctuations, the earnings of coal-heavers were admittedly high; their petition to Parliament in 1764 runs: "as the work of these men is hard and severe, they are proportionately paid larger wages than other labourers. . . ." Adam Smith estimated their earnings at from 6*s.* to 10*s.* a day, or "four or five times the wages of ordinary labour," and accounts for it by the "hardship, dirtiness and disagreeableness" of their work, and its "unavoidable irregularity."

The chief element in keeping wages high seems to have been the quasi-monopoly given them by the nature of their work and their organisation in gangs. The men would make sudden combinations to raise rates when labour was scarce, and would stop work in order to increase the rate already agreed upon if more ships appeared in the river. They were much given to drinking, and if one man was absent, or drunk, the work of the whole gang was stopped.[3]

The grievances of the men were still more serious. They were victimised by a set of middlemen called coal-undertakers, who engaged and paid the gangs on behalf of the masters of the ships. They were almost all river-side publicans, and in slack times gave employment only to those who drank most, made large deductions from their wages on various pretexts, "forced them to pay 4*d.* a quart for beer not worth a penny, and sold them gin and tobacco

[1] *Public Advertiser*, 8th August, 1768. (One of a series of articles on the coal trade, evidently by Sir John Fielding.)

[2] *Commons Journals*, 28th April, 1757.

[3] *C.J.*, 28th April, 1757.

not worth anything." [1] Small beer was sold at the price of strong, " bad brandy and other strong liquors in short measure and at the best prices without their daring to complain." [2] These were particularly serious injuries when a large consumption of beer was regarded as a necessary expense of the coal-heavers' calling : " As their labour is very hard," they say, " no man can go through it with less than a gallon of beer a day." [3]

When the undertakers became established as middlemen is not clear, but the system was in existence in 1724.[4] By 1750 at least there was a running feud between the undertakers and the coal-heavers, and the situation was made much worse by administrative conditions in East London, where the justices of the peace were certainly timid and reputed corrupt. About this time, out of twenty undertakers, nineteen were said to be river-side publicans who were in the habit of getting certain headboroughs (constables), " who were devoted to their interest, to take up any coal-heavers who grumbled, complained or made any disturbance in their houses, concerning the hardships imposed on them . . . and chiefly late on Saturday night; by which means they were carried to the watch house, and there exposed to public view (*in terrorem*) all Sunday," to be brought on Monday before justices alleged to be in league with the undertakers, " who generally sent them to prison . . . unless they would agree to beg the undertaker's pardon for pretended faults . . . and likewise promise to [*sic*] future submission, and in other cases to pay whatever damages the said undertakers should demand." In order to indemnify themselves against legal proceedings on the part of coal-heavers, the justices in question were said to have taken, about 1751, bonds from the undertakers in £500 " for such their arbitrary and oppressive proceedings." [5]

Consequently, in order to stop a state of things in which extortion was tempered by riot, the coal-heavers petitioned Parliament for a redress of their very serious grievances. This was the first of a series of complaints continuing at intervals till 1843. Several Acts were passed to check the abuses complained of, but only the last was successful. These followed two main lines : the first and the last aimed at eliminating the undertakers altogether, the others forbade undertakers to be publicans, to make deductions from wages or to pay in anything but current coin. The men were always anxious for a fixed rate of wages,

[1] *C.J.*, 27th March, 1770.
[2] *The Coal-heavers' Case* [1764].
[3] *The Case of the Coal-Heavers* . . . [1769].
[4] *C.J.*, 12th May, 1729.
[5] *The Case of Mr. Francis Reynolds* . . .

and in 1770 and 1807 a rate was fixed. The Bill they presented in 1758 contained a clause for the regulation of wages which was not allowed to stand.

In the eighteenth century industrial legislation was generally based on a petition for redress of grievances and was carried through by private Bill procedure. The function of the Government was to hold the balance between the various conflicting interests and to see that no combination in restraint of trade was countenanced. The first Coal-heavers' Act of 1758 is a completely typical example, and it is an expression of the aims of the coal-heavers, modified as to method since 1708, as they no longer ask for incorporation, but substantially the same as in 1843. These were, that there should be a due regulation of the coal-heavers to prevent disorders committed by them, that they should be protected from the oppressions of middlemen by being under the care of some impartial authority, and that thus protected they should establish a pension fund.

Evidence was given to the Committee of the House of Commons that the men were obliged to spend a certain sum daily at the alehouses of the undertakers, who made other deductions from their wages to the alleged amount of £7000 a year (another estimate says £10,000). It would pay them better, they said, to work for the masters at 20*d.* than for the undertakers at half a crown. In order to gain a more complete control over the men the undertakers had recently bought up all the coal-shovels, and induced the only two makers to work exclusively for them, and had then charged for shovels at the extortionate rate of a shilling a ship.

A coal-heaver stated that one Mr. Camphire, who had been the engrosser of the shovels, had told him that "he would give him a note to take out of his rotten Bill and he would punish the coal-heavers for applying to the House of Commons." This involved the undertakers in the greatest offence known to an eighteenth-century House of Commons—a breach of the privileges of the House—as well as in a combination in restraint of trade. Camphire was summoned, examined, denied the words, was confronted with witnesses, convicted of uttering them, and was brought to the bar to be reprimanded on his knees by the Speaker.[1]

This incident, and the undoubted fact of the corner in shovels, probably procured the coal-heavers their Bill, to which there was

[1] *C.J.*, 9th February, 19th April, 28th April, 29th and 30th May, 2nd and 6th June, 1758.

much opposition from owners and masters of ships in the coal-trade, who maintained that it "will not only tend to the damage and hurt of the coal trade, but be of disservice and injury to the publick." The success of the undertakers in resisting repeated attempts to check their extortions is remarkable, and is probably largely owing to their relations with the coal-shippers and with the owners and masters of colliers. The cross interests and ramifications in the trade were many and complicated, and in fact its history from the sixteenth century onwards is one of repeated recriminations between different interests alleging combinations and oppressive dealings.[1] In 1729, in one of these recurrent crises of counter-accusations, it appeared that an office was kept at Billingsgate in correspondence with the fitters at Newcastle for arranging in what order the ships should be unloaded in order to keep up the price of coals. The keeper of the office was a coal-undertaker, and he defended the arrangement as essential to the shipping interest, which had been victimised by a combination of the London lightermen, who were the chief buyers of coals.[2] Mayhew was told that the undertakers before the Act of 1843 were relatives of the northern ship-owners, then also coal-exporters, so that the connection of interests seems to have persisted.

The Act of 1758 was fatally defective, but it was a turning-point in the history of the coal-heavers, and an interesting expression of their aims. The preamble declares the necessity for "a due regulation" of the coal-heavers, and that as they were "subject to no legal jurisdiction properly impowered to compel them to do their duty in all respects, obstructions and delays often happen in the unloading of coal-ships . . . to the great detriment of the publick." They were also subject to great abuses. The coal-heavers were therefore put under the "care

[1] In 1595 a Commission was appointed to inquire into the abuses in the coal trade, in connection with which the Council wrote on October 27 to the Bishop of Durham: "Whereas we are informed that the prices of sea coles are of late rysen to very highe rates within the Citty of London and elsewhere" . . . since "divers of the richer sorte of the towne of Newcastle havinge a lease from your lordship of xii cole pittes . . . do forbeare to set the same a worke upon a covetous desire of excessive gayne to themselves and do worke in certain colepittes of their owne in other places which yelde a far worse sort of cole and less quantity. . . . " *Council Register*, 27th October, 1595.

[2] *C.J.*, 9th and 12th May, 1729. Each side proved its allegations, and the House passed a resolution "that several agreements and combinations have been entered into by the masters and owners of ships using the coal trade . . . unto the Port of London, and also by the lightermen of the said Port, which said agreements and combinations are illegal and tend to the enhancing the price of coals, to the oppression of the poor, the prejudice of several manufactures and to the lessening the public revenue."

and management" of the Alderman of Billingsgate Ward or his deputy, "who by virtue of such office is governor of the Fellowship of Billingsgate Porters, to whom in former times the unloading of all coal-ships in the river Thames did properly of right belong." He was to appoint a registrar of the gangs of coal-heavers who was to make arrangements for unloading with the masters of ships. Each gang was to appoint a foreman, who was to attend the agent daily from six to twelve a.m., when his gang was not at work. The agent was to receive and distribute the pay within three days of the clearing of the ship, without any deductions other than those specified in the Act. Deductions on pretence of money due for liquor or goods advanced to the men were forbidden under a penalty.

The fatal flaw in the Act was that it was permissive; those who desired to be under the management of the Alderman were to register themselves. There were other clauses with possibilities for mischief, though they were probably unenforceable. Labourers refusing to work, unless "ill or unable," were to be struck out of the register. If a man left a ship before she was cleared, 20*s*. was to be stopped out of his pay. Even the clauses relating to the great desire of the men, a pension fund, were likely to cause trouble. Two shillings in the pound were to be stopped out of wages to constitute a fund, on which the first charge was to be the expenses of procuring the Act and of administration. Out of the remainder, if sufficient, 7*s*. a week was to be paid in sickness, 6*d*. a day to those past work through old age, 40*s*. for the burial of any labourer whose own effects were insufficient, £5 for widows and 40*s*. for children under ten. The "charitable donations" (burial money excepted) were not to be made for the first year.[1]

The office was duly opened in September 1758; forty-nine gangs registered themselves, and the Act worked for a time, it was said, "to the mutual advantage of the publick and the coal-heavers." But the undertakers soon discovered that the Act was not compulsory and succeeded in decoying the men from the office. Their first step was to send "circular letters" to Scotland, Ireland and other parts of England offering work at unloading coal-ships at which from 10*s*. 6*d*. to 18*s*. a day could be earned. "Many unthinking men flocked to London . . . expecting immediately to make their fortune." As they were unable to work in the coal-heavers' manner, with shovels, they "were set to work by the undertakers to deliver ships with baskets, which they call whipping, and received 2*d*. or 3*d*. per score more than

[1] 31 Geo. II. c. 76.

what they gave the labourers." The coal-heavers were then induced to leave the office by offers of higher pay and preference in employment, and representations that the deduction of 2*s.* in the pound was not compulsory. Finally the undertakers refused to employ any man who worked for the office and it was closed for want of support. The undertakers were again supreme and their deductions were heavier than ever.[1]

This affair shows the defects of private Bill procedure in industrial legislation. The preliminary expenses were a burden on administration. The agent for the Bill was one Reynolds, an attorney and landlord " of a small brewhouse and alehouse thereto adjoining " in Wapping, who for some years had been carrying on a Press campaign against the undertakers and who acted as agent or registrar under the Act. Reynolds was, according to himself, ruined by the undertakers, who induced certain Wapping justices to refuse a licence to his alehouse, and concocted three separate charges against him of speaking " seditious words," by which, though " honourably acquitted," he was put to great expense.[2] He was alleged to have cheated the coal-heavers of £500 or £600,[3] which may only mean that preliminary expenses amounted to this sum. At all events it was he who organised a petition to Parliament in 1762 for the amendment of the Act which was not followed up because he became a prisoner for debt.[4]

In 1764 the coal-heavers again petitioned for an amendment of the Act, but nothing was done, and in 1768 matters came to a crisis. The coal-heavers had been recruited by fugitive White-boys from Ireland, and it was probably these who introduced the methods of the secret society into Wapping. About February, according to one of the members, " forty-five coal-heavers entered themselves into a society by the name of Bucks . . . every member on his admission was sworn to be always aiding and assisting his fellow-members, and likewise not to reveal or divulge anything that was done, even though it was murder. . . ." [5] Out of a total of about 670 coal-heavers, two-thirds or more were said to be Irish, " a few of them quiet laborious men, the rest are of a riotous disposition and ready to join in any kind of disorders, and from 70 to 100 are the very dregs of mankind, capable of all kinds of mischief." [6]

[1] *The Case of the Coal-Heavers . . .* [1769]; *C.J.*, 26th January, 28th April, 1762, and 28th January, 1764.

[2] *The Case of Mr. Francis Reynolds . . .*

[3] *Treasury Solicitors' Papers*, No. 1408.

[4] *C.J.*, 28th April, 1762; *Treasury Solicitor's Papers*, No. 1408.

[5] *Ibid.*, No. 2696. [6] *Ibid.*, No. 1408.

At all events the situation was explosive, and from February till the middle of June the coal-heavers terrorised Wapping and Shadwell. First they disputed with the undertakers over wages and succeeded in raising them. Then they declared they would be under the Act of 1758, and applied to Beckford, as Alderman of Billingsgate Ward, to reopen the office. Beckford appointed one Russell as his agent, who employed John Green, keeper of the Roundabout Tavern in Shadwell, to negotiate with the men, and in March the office was opened. But in the meantime the cause of the coal-heavers had been taken up by a Wapping justice, Ralph Hodgson, who had opened an office where his clerk issued tickets at a shilling each, purporting to license the holders to work as coal-heavers, anyone attempting to work without one being ducked in the Thames at the end of a rope. Most of the Irish coal-heavers registered with Hodgson and chose "forty-five Brothers" to govern them and exclude all rival gangs.[1] Forty-five was an inevitable number in 1768.

Hodgson's motives may have been quixotic, or they may have been self-interested (as the Middlesex Bench thought), but his methods were a direct incentive to disorder. The coal-heavers went about with a banner inscribed "Misery redeemed from Slavery, Oppression and Want by Hodgson."[2] On St. Patrick's Day he marched at the head of a large body of coal-heavers through Wapping and Shadwell, each man, Hodgson included, wearing "a green herb in his hat called a shamrogge," and this "tho' not an Irishman, but a native of England, an utter barrister of Gray's Inn and one of His Majesty's justices of the peace for the county of Middlesex." Every five hundred yards or so, Hodgson halted and waved his cane, to be answered by the huzzas of the mob, the procession ending at a public-house at Stepney, where Hodgson entertained some of his followers at supper. This was after a series of riots and disturbances, and its immediate sequel was an attack on the house of an unpopular justice.[2]

Hodgson told the men that they were not obliged to register at the statutory office, and that if they did, 2*s.* in the pound would be deducted from their wages. Consequently no coal-heavers could be induced to register there, and though it had been demanded

[1] *Middlesex Sessions Records*, 1768, 19th May (petition of "the inhabitants" of Shadwell against Hodgson) and 8th September (representation to the Lord Chancellor for the removal of Hodgson from the Commission, Hodgson having been examined, and though his counsel had cross-examined the witnesses against him, he had produced no witnesses "except an affidavit of his own making, which he declined reading").

[2] *Public Advertiser*, 8th August, 1768 (article evidently by Sir John Fielding).

by the men, it came to be regarded as a means of breaking a riotous combination. Russell, after many attempts, through Green, to persuade gangs to register, advertised that unless gangs applied for registration in six days' time, "new gangs will immediately be raised, appointed and registered on the original establishment, and whoever shall presume to obstruct or molest the said gangs . . . will be prosecuted with the utmost rigour the law directs. . . ." This was a signal for a state of almost open war. Green, who lived among the coal-heavers, bore the first brunt of it. After preliminary threats to his life and attempts on his house, a concerted attack with fire-arms and brickbats, to the cry of "Wilkes and Liberty," was made on April 20 from about eleven at night till eight next morning. Green, with the help of a sailor who happened to be drinking in his bar, defended the house with great courage, firing from three blunderbusses and a musket loaded for him by the sailor. The coal-heavers, having openly purchased ammunition, took possession of the two houses opposite and fired from the windows into Green's house across a street only twenty-two feet wide.

The walls and ceilings of "The Roundabout" were riddled with bullets, three barrow-loads of brickbats and stones were taken out of it. The lower windows had been boarded up, as they had been broken in a previous attack. Two men were killed, one apparently by the mob, before Green began to fire, the other was shot dead by Green in the act of breaking down the door. It was established that Green fired first with powder only, and used ball only in self-defence and after repeated warnings. In the morning, his ammunition exhausted, he managed to escape and to hide in a sawpit, the mob being told that he had reached the river. At last the Guards came up with Justice Hodgson, who committed him and the sailor to Newgate for murder while no steps whatever were taken against the mob, whose ringleaders were well known and, indeed, continued to march about at the head of armed bands.[1]

After this the disorder in the waterside districts grew rapidly worse. The sailors struck for higher wages, boarded the ships in the river, unrigged them, and for some time no vessels were able to sail. The attention of the Government was chiefly absorbed by the Wilkes mobs, which were threatening to pull down the King's Bench prison. A mob of sawyers pulled down a recently built saw-mill. There were strikes and disturbances by tailors,

[1] *Treasury Solicitor's Papers*, No. 1408; *London Sessions Papers*, July 1768. Cf. Walpole's *Letters*, ed. Toynbee, vii. p. 208 (an inaccurate account).

coopers, lightermen, watermen and others, which caused great alarm, as their usual procedure was to meet in Stepney Fields and march in a body to Palace Yard to present petitions.[1]

The coal-heavers, who had begun the disturbances, remained the most violent. The seamen in the coal-ships were not among those who had refused to sail, as they were paid a lump sum for the return voyage from the Tyne, regardless of the time taken, and they were aggrieved at the coal-heavers, who kept them indefinitely in the river by refusing to unload the ships. The seamen were at last employed to unload, being paid at a rate of 1*s.* 6*d.* a score, less than the coal-heavers demanded, but in other ports than London the sailors unloaded the coal without being paid for it. The result was war between the coal-ships and the coal-heavers. At night there was constant firing between the ships and the shore. Attacks on the ships were beaten off by the sailors; the coal-heavers attempted to prevent their landing to get supplies. Bodies of coal-heavers marched about "armed with bludgeons, cutlasses and pistols, etc.," crying out, "Five pounds for a sailor's head and twenty for a master's; we will cut the lightermen's throats and murder all the meters" (the men who measured the coal while it was being unloaded). Green's acquittal at the Old Bailey on May 20 infuriated the coal-heavers against his witnesses. On May 24, two boat-loads of sailors who had come ashore, apparently by invitation to a conference with the coal-heavers, were attacked and a sailor called Beatty was killed in a peculiarly brutal way.[2]

Still nothing was done. The justices in the district seem to have been afraid to ask for soldiers, knowing that protection would be temporary and retaliation certain. At last, on June 9, on information from the Admiralty to the Secretary of State that the inhabitants of Wapping were living in a state of terror and were removing their goods and families, a detachment of Guards was sent.[3] Peace was restored, some of the ringleaders were arrested on June 13, and taken before Sir John Fielding at Bow Street. Several were committed for the attack on Green and the murder of Beatty. At the same time, a number of the older coal-heavers came to Sir John and stated their grievances. He arranged with certain of the masters of ships for their direct employment and payment without deductions, although these declared their

[1] *S. P. Dom., Entry Book* 142, *passim.*

[2] *Treasury Solicitor's Papers*, No. 2696; *London Sessions Papers*, July 1768; articles in the *Public Advertiser*, evidently by Sir John Fielding, 21st July and 8th August, 1768.

[3] *S. P. Dom., Entry Book* 142.

intention of never employing Irish coal-heavers again, but, as a Bow Street Press report said, " it will be difficult to find men so adapted from strength, etc. to execute this laborious task . . . as the Irish are, and as they now see the danger of even going armed [some of the rioters were indicted on the obsolete Statute of Northampton, 1328], it is to be hoped that peace and industry will supply the place of tumult, resentment and mischief." [1] To the Secretary of State Fielding wrote that the disturbances would probably subside, " though it is clear from their stating their case that this body do labour under some grievances which require Parliamentary aid or redress, for they have been tossed about between undertakers, registry office and other interested agents, greatly to their injury." [2] In July seven men were hung for the attack on Green's house and two for the murder of Beatty. In the same month the office was reopened, in the following April men were working from it, but the undertakers would not employ those that did if they could get others. A petition for legislation in 1769 was unsuccessful,[3] but in 1770 the coal-heavers got an Act to replace the ineffectual one of 1758. Undertakers were forbidden to be victuallers, to make deductions from wages on any pretence or to pay in anything but current coin. Disputes were to be determined by the Lord Mayor or an alderman " as disputes between masters and servants in husbandry." Wages were fixed at 1*s.* 6*d.* a score, subject to alteration by the Mayor and aldermen in January of each year, but the captain was to be allowed to employ his own men at rates to be arranged between them. The foreman of each gang might stop 6*d.* in the pound towards the expenses of procuring the Act, which, unfortunately, was for three years only, and at the end of the term was allowed to lapse.[4]

In 1796 the coal-heavers petitioned that they had long been deprived of the benefits of the Act, and " have for several years past laboured under the greatest hardships through the impositions of some of the coal undertakers, who oblige the petitioners to give them part of what they earn in order to obtain employment. . . ." [5] A Bill was brought in but not proceeded with.

The way in which the coal-heavers were victimised was next brought to notice by Colquhoun, who made a study of river-side labour and of the thieves who systematically plundered ships and wharves, and as magistrate at the Thames Police Office was brought into close contact with the coal-heavers. Shortly after

[1] *Public Advertiser*, 17th June, 1768.
[2] *S. P. Dom., Entry Book* 106, p. 360.
[3] *C.J.*, 20th April, 1769.
[4] 10 Geo. III. c. 53.
[5] *C.J.*, 11th February, 1796.

the office was opened in 1798 it was suddenly and violently attacked by a mob of coal-heavers, who swore that the building should be demolished and its inmates killed, because two coal-heavers had been fined under the Bumboat Act for being in unlawful possession of coal. Colquhoun read the Riot Act and fire-arms were used on both sides. Two police officers were wounded, one mortally, and a coal-heaver was shot dead.[1]

After this unpromising beginning, the coal-heavers seem to have become reconciled to the existence of the office and were on good terms with the magistrates. Colquhoun, in his book on *River Police* (1800), gave a detailed account of the way in which they were plundered by the undertakers. Each man was supposed to work forty-five ships in a year; the undertakers sent on board each ship 12*s*. worth of gin and porter a head and charged each man a commission of 1*s*. 4*d*. In addition there was competitive drinking to secure employment in slack times. Though earnings were high during the war, in 1800 a pound a day and upwards, the average amount taken home, according to Colquhoun, was not more than 15*s*. a week.

In 1803, one of the many Acts for regulating the London coal trade forbade victuallers to act as undertakers. This was replaced in 1807 by a more comprehensive Act, thirteen clauses of which related to coal-heavers. No one was to act as an undertaker without an annual licence (costing £1) from the Court of Aldermen on a recommendation from two local magistrates. No victualler was to act directly or indirectly or to provide shovels, baskets, etc. These were to be provided by the master of the ship, who was also to pay 1*d*. a chaldron to the undertaker in full compensation for his trouble. Wages were to be "really and *bona fide*" paid to the undertaker (if any), who was to divide them immediately among the men. No part of wages was to be paid "by way of barter . . . in any coals, goods, wares, merchandise, meat or drink, lodging or materials for wearing apparel, or in any other matter or thing whatsoever other than current coin." No coal-heaver was to be paid in an alehouse. The Lord Mayor or an alderman was empowered to hear complaints and to suspend any undertaker. Wages were fixed at 3*s*. a score, and the Court of Aldermen was given power to raise or lower them.[2] There was the usual clause allowing sailors to unload, which appears to have been an insurance against the recurrence of the events of 1768, but it was stated in 1830 and in 1861 that sailors never did unload, as they were fully occupied with the ship.

[1] *Treasury Solicitor's Papers*, No. 2243.

[2] 47 Geo. III. c. 68.

Penalties under the Act were recoverable by summary process before a magistrate. Nevertheless it was not effective, except in fixing the rate of wages, which remained unaltered till 1831, when the Act was repealed. A writer on the London coal trade in 1817 even says that the Act had made conditions worse, for it had not lessened the interest of the undertakers with the masters of the ships, while the former arranged with the latter to procure the licensing of deputy undertakers, who usually kept a shop to sell bread, groceries, etc. "Agreeable to the Act, he pays the basket-man at his shop, and, paying him all his demands, they then proceed to the original undertaker's house, where the basket-men generally pay the coal-heavers, though contrary to the Act." [1] These allegations were confirmed in a parliamentary inquiry of 1830. The publican bribed the master of the ship to secure the undertakerage for his man of straw, and recouped himself by a charge on each man of 2*s*., known as *tow row*, which after the opening of the inquiry masqueraded as a charge for "old score" for liquor. Besides this, each man was forced to pay 2*s*. a day for gin and beer, and only excessive drinkers, especially those with a score against them, were sure of employment.

The conclusions drawn by the Committee from this evidence were in strict accord with the prevailing economic doctrine. The fixing of wages at 3*s*. a score "being higher than the present market rate . . . much abuse has arisen in the distribution of the increase. . . ." [2] Consequently, by the Act of 1831, which replaced that of 1807, the coal-whippers were entirely unregulated, in the belief that wages being left to find their economic level, the abuses of publicans and undertakers would disappear. On the contrary, they became progressively worse. An order in 1838, that the men should be paid on board the vessels,[3] did not mend matters, and in 1843 legislation was forced upon Parliament against its economic convictions. The Act was drafted by the City Remembrancer under the instructions of the Corporation,[4] was introduced as a private Bill and was taken over by Mr. Gladstone. The coal-whippers were active in its support, petitioned Parliament on their own account and obtained signatures to petitions from "the inhabitants of the Tower Hamlets,"

[1] R. Edington, *A Treatise on the Abuses of the Coal Trade . . .* 2nd ed., 1817, p. 41.

[2] *Report of the Select Committee on the State of the Coal Trade in the Port of London*, 1830.

[3] 1 & 2 Vict. c. 101 (local and personal), sect. 12.

[4] *Minutes of Evidence before the Select Committee on the Coal-whippers' Bill*, 1851.

from " the Port of London " and from " Stepney Union." The shipowners in London and in the northern coal ports, according to their custom, petitioned against the Bill.[1]

The Act appears to be based upon the suggestion of the coal-heavers themselves to the Committee of 1830. One of these, asked how he would remedy the abuses, answered, " in my opinion, by regulating an office and by employing men; it is not in paying men, it is in employing them, because if a man does not suffer the imposition he is to have no employ." This was a reversion to the methods of 1758, and the problem to be solved was that of avoiding the merely permissive registration which had wrecked that Act without giving the registered men a complete monopoly. The result was an Act,[2] accused by its opponents of being a restrictive monopoly, but one whose " every page," according to a supporter, " breathes competition and invites competition." [3]

It established an office for the registration and employment of coal-whippers under commissioners, four to be appointed by the Board of Trade and four by the Corporation of London. The expenses of the Act and its administration were to be defrayed by a deduction of a farthing in the shilling from wages and the hire of unloading tackle to the masters of ships. The ships might be unloaded by their crews or by the " *bona fide* servants " (*i.e.* men previously employed for at least fourteen consecutive days) of the owner or purchaser of the cargo. Except in these cases all masters of coal-ships were to apply for whippers at the office, where the different gangs were to offer to unload at a certain price and the lowest offer was to be accepted. Should the offers be equal (as in practice they were) the gangs were to be employed in rotation. If the master could not get a gang at the price which he offered he was to be allowed to employ non-registered men, but was not to pay them more than the rate offered by the office gangs. There was also a provision allowing for the use of machinery.

The Act gave complete satisfaction to the men, who were at last able to establish the pension fund they had so long desired. It was a temporary Act, at first for three years, and in 1846 all the registered coal-whippers signed a memorial to the Commissioners, thanking them for

> " their gratuitous and truly benevolent exertions to better their condition, for their release from a system that made

[1] *C. J.*, xcviii. pp. 456, 465, 515, 521, 551.
[2] 6 & 7 Vict., c. 103 (local and personal).
[3] *Minutes of Evidence* . . . [1851].

them paupers, and for carrying fully into effect the kind intentions of the legislature to emancipate them from a state that degraded them physically and mentally, that made them a terror to the neighbourhood in which they dwelt, the destroyers of the peace of their families, and bad examples to their children. . . . Your memorialists further state that great improvement has taken place in the habits of the men at present under your control; that peace and happiness has taken the place of discord; that the appearance of coal-whippers before the magistrates of the district is now of rare occurrence; that the men whose name was once a byword and reproach have, through the influence of the present equitable system, in a great measure removed the prejudice against them, and have relieved the parishes in the neighbourhood of a great burden, and are now not only anxious to provide for their present exigencies, but in successfully establishing an extensive Benefit Society, whose object is to provide for their necessities in sickness and to bury the dead, and preserve them from being dependent on the bounty of others, have become, what they never could be under the old system, good and useful members of society." They entreat the Board to impress on the Government the necessity for renewing the Act: "Your memorialists, having tasted the blessing of freedom from the degrading truck system, are now unfitted to resume their former degraded position; and, from the well-known hostility of their former employers, they would assuredly in that case be reduced to a far worse state (if possible) than that from which they had been rescued; confusion would ensue, strikes would unavoidably be frequent. . . ." [1]

The Act was renewed, with certain amendments, for five years, and in 1851 for a further five years. It had been much opposed as contrary to sound doctrine, and passed "because the stern principles of political economy must sometimes yield to the cry of misery and considerations of humanity." [2] In 1856 it was allowed to lapse on the ground that it was no longer necessary, having delivered the men from "a state of squalid poverty and almost hopeless demoralisation." The shipowners had always been opposed to it, they complained of delays and disliked the office. The Government agreed to the dropping of the Bill for renewal on the shipowners signing an agreement themselves to establish an office for the engagement of the men and never to hire men from, nor pay wages at, any public-house. They further undertook that if this engagement was broken in letter or in spirit they would not oppose the renewal of the Act. An opponent of

[1] *Parliamentary Papers*, 1846, XLIV, p. 99.
[2] *Hansard*, 3rd series, Vol. 70 (Debate of 17th July, 1843).

renewal admitted its original justification, but saw no necessity "for sanctioning the continuance of a law which went to perpetuate a Trades Union, with all the evils which combinations of that kind necessarily have." [1]

As a matter of fact, the coal-whippers seem strangely remote from nineteenth-century trade-unionism—organisation, aims and mentality date rather from the eighteenth century, if not from the sixteenth or earlier. The language of the petition of 1846 is curiously reminiscent of the petitions of 1758, of 1762, 1764, 1769, 1770 and 1796. The men had always been ready for a rather rigorous discipline from an outside authority—probably because they were the chief sufferers from the disorders, fights and sudden strikes which were not effectively checked till the Act of 1843, under which delinquents were reprimanded by the Commissioners, punished by suspension, and in extreme cases by expulsion from the office and its advantages. The authoritarian management under which the men were not allowed to gang themselves (on the contrary, care was taken to mix Irish with English) was not resented. It is abundantly clear from the evidence given to the Committee of 1851 on the Coal-whippers' Bill (renewal) that the office was loyally supported by the men and that both Commissioners and office staff—though careful not to risk an accusation of restricting labour or interfering with wages—regarded themselves as protectors of the men's interests. Hence probably the resentment of a certain type of employer as expressed by a coal merchant who, when asked if he could make any suggestions for the improvement of the office, answered, "We want the men to be servants, not masters, which they are now," an assertion certainly not borne out by the general tenor of the evidence.

On the other hand, some employers approved of the Act and considered it a benefit to the trade. Mr. Charrington, for instance, said that it had stopped the strikes and checked the drunkenness and riot which were so frequent before 1843, to the great pecuniary advantage of the community; "I consider that it is framed as well as any Act can possibly be, not to interfere with the principles of political economy or the freedom of labour, and that it does so act, and that there is as great an opportunity for competition as if the restrictions (so called) were done away with altogether." But the theorists remained convinced that the Act was restrictive and therefore must be against the true interests of all parties. When the clerk of the Thames Police Court, with forty years' experience of the district, stated the great improvement in the

[1] *Hansard*, 3rd series, Vol. 142 (Debate of 19th June, 1856).

conduct of the men, he was asked, " Are you not aware that it is a restrictive Act? . . . Do you not consider that any restriction upon labour must be rather calculated to increase the business of your Police Court? " and answered " . . . instead of its increasing the business . . . it has rather diminished it."

It is clear that in 1851 the number of the men in relation to the work had increased rather than otherwise, and that the proportion of the work done by registered gangs (then estimated at 75 per cent.) was tending to decline owing to changes in the methods of unloading coal and a growing number of *bona fides*. Changes were due to improved wharf facilities enabling coals to be " backed " or taken straight from the collier to the wagon without the intermediate process of being whipped into a barge. The colliers were still sailing vessels and machinery was only just beginning to be tried. In 1851 one " floating steam engine," with a staff of an engineer and five whippers, which was placed on the decks of colliers, had been working for two or three months, but was still said to be in an experimental stage, and though it had recently unloaded a ship of 400 tons in three days, its superiority over the old method had not been established. The transhipment in the Pool of coal for export from colliers to " great ships " of 1200 tons or so was substantially a new process since 1843, and though whippers were employed, there were complaints that the process was unsuitable and that the men took advantage of the need for haste to demand dispatch money.

Wages had fallen since the Act, and since the days of the statutory rate, abolished in 1831. A rate of 3*s*. per man per score, according to the new method of calculation,[1] by which a ton was estimated at five-sevenths of a London chaldron, was equivalent to a gang rate of $11\frac{4}{7}d.$ per ton (each man receiving one-ninth). Between 1831 and 1843 strikes had been frequent and variations wide, one witness says from 7*d*. to $11\frac{1}{4}d.$, another from 6*d*. to $1/1\frac{1}{2}d.$, but the extremes may be taken as exceptional, and it is to be noted that the variations were less wide than in the eighteenth century. After the Act the rate was more or less stable at 9*d*., and in 1849 was reduced to 8*d*. by an agreement between the whippers and the coal-factors on behalf of the owners, that if the reduction was made the registered whippers should have the whole of their work, an agreement which the owners had failed to keep. In 1851 the rate was still normally 8*d*., though in exceptional circumstances 4*d*. had been taken. The owners complained that

[1] The measurement of coal in the Port of London was altered by 1 & 2 Wm. IV. c. 76 from the chaldron to the ton.

the office kept the rate at 8*d*. when, if outside labour could be freely employed, it would fall to 6*d*., a price they considered reasonable in view of the fall in freights (said to be 40 per cent. since 1843) and in the cost of living.

Until 1843 these rates had been subject to heavy deductions. It is a curious fact that statements as to the net weekly wage vary little. In 1800, when three pounds or more a week was earned, 15*s*. according to Colquhoun was the amount taken home. In 1830 "a constant man" would earn 25*s*. 3*d*. and take home 16*s*., and a coal-whipper stated that out of earnings of £1 a man could not expect to take home more than 11*s*.—"not if he intended to obtain work at that house again." In 1851 average earnings were said to be 16*s*. 8¼*d*. a week, a rate which, though not questioned, is inconsistent with the statements of a coal-whipper that the average pay per hour was a shilling, and that rather less than four days a week were worked of from seven to eight hours a day, though occasionally from twelve to fourteen hours a day were worked. A gang would unload from fourteen to sixteen tons in an hour. The amount of employment also seems to have varied little. In 1769 the men represented that though their pay was high, they were not employed, on an average, more than three days a week.[1] In 1830 a "constant man" with the best chance of employment, said he worked four days a week. In the war, when earnings were so high and the rate of pay the same as in 1830, slack times were probably reduced to a minimum.

How labour was recruited before 1843 is not clear. Until the introduction of whipping the difficulty of the work and the large size of the gangs probably enabled the coal-heavers to control the admission of new-comers. After this, the admission of new gangs became a question over which blood was shed. After 1843, admissions were regulated by the registrar under by-laws made by the Commissioners and approved by the Board of Trade after having been submitted to the coal trade. By the Act he was required to register every applicant at a fee of 4*d*. Supernumerary, untrained men were registered as candidates, so that besides some 2000 registered whippers there were from 1000 to 2000 men waiting for admission to a gang. The number was very fluctuating, as in summer many went off harvesting or brick-making. Normally they were admitted in rotation after having been registered about four years. When a vacancy occurred the two men next on the list who answered to their names were set to do the work of one experienced man, dividing one man's pay.

[1] *The Case of the Coal-Heavers . . .* [1769].

One held the basket, the other steadied it, so that the work of the gang was not delayed. After having worked in couples for twenty days they were considered to have learnt the work and to be qualified whippers. This was the custom of the trade, ratified by a by-law, but whether the men so trained were necessarily ganged at once is not clear. The evidence of the registrar on the point is contradictory, and he seems to have been evading a possible charge of restricting the freedom of labour. He stated, however, that should there be a greater demand for gangs than the office could satisfy, he should supply men from the registered candidates.[1]

Another instance of the curiously stable character of the occupation is that the proportion of Irish to English seems to have varied comparatively little. In 1768 the Irish had been "two-thirds or more," in 1851, half were said to be Irish, a quarter English, and a quarter mixed Irish and English. The turbulent gratitude of the men to Justice Hodgson in 1768 for taking their part had its counterpart in 1848, when, as a thank-offering to the Government for the Act of 1843, the coal-whippers to a man were sworn in as special constables to deal with the disorder expected from the great Chartist meeting—a contrast with 1768, when the coal-heavers' rallying cry had been "Wilkes and Liberty."

M. Dorothy George.

[1] *Minutes of Evidence* . . . [1851]. On only one day, however, since 1843 had all the gangs been employed.

THE LAST YEARS OF THE IRISH CURRENCY

It is exactly one hundred years since the Irish currency ceased to exist, and it may not be without interest, on the centenary of its disappearance, to recall some of the circumstances of its passing away. The precise date at which that scale of monetary valuation which was afterwards known as the Irish currency first came into existence is not very clear. In the opinion of some authorities, the value of the Irish penny was fixed in the reign of James II, while others prefer to date that event in the reign of William III. There is no need for us to engage upon any controversy about the matter, as the precise date is of no consequence except to the antiquary; it is sufficient for our purpose to know that the value of the Irish penny was fixed in the closing years of the seventeenth century at one-thirteenth part of a shilling, in contrast with the English penny, which was one-twelfth.[1]

The whole Irish currency was based upon this depreciated penny. The English pound and the Irish pound both contained 240 pence, but the pence in the two cases were of different values. Starting from the basis that the Irish penny was worth twelve-thirteenths of the English, it is easy to calculate that the Irish pound was worth only 18*s.* 5½*d.* English, and that the English pound was worth £1 1*s.* 8*d.* Irish. The latter was the rate at which English gold and silver circulated in Ireland, where its value as money of account was 8⅓ per cent. higher than in England. The difference between the two currencies was really nothing more than a difference of accounting; the standard of value was the English pound, which, however, did not circulate.[2]

The rate of exchange between England and Ireland corresponded with the respective values of the pound in either country, and the par was therefore called 8⅓ per cent. So long as gold remained the standard of value in both countries the exchange could move on either side of this figure only within the so-called gold points. And so, in fact, we find that throughout the

[1] Palgrave, *Dictionary of Political Economy*, art. "Irish Currency."

[2] Macleod, *Theory and Practice of Banking*, 3rd ed., Vol. II. p. 8. *Explanatory Memorandum on Irish Currency : Parliamentary Papers*, 1868–9, Vol. 35, Part II. p. 379. Evidence of Mr. Robert Culley before *Royal Commission on International Coinage : Parliamentary Papers*, 1867–8, Vol. 37, p. 109.

eighteenth century the Irish–English exchange fluctuated in the close neighbourhood of this figure, with one notable exception in the years 1753–4, when it rose nearly 3 per cent. above par. At that time there was an unusually extensive issue of paper notes circulating in Dublin, and, as soon as the exchange reached this abnormal figure, there was a financial panic, and, in the frantic rush to convert the paper into gold, all the banks in Dublin except two failed. There followed a total annihilation of the bank paper and a speedy restoration of the exchange to its normal figure.[1]

The year 1797 is well known as the date of the Bank Restriction Act. In spite of the fact that the exchanges were favourable to Ireland and that there was plenty of gold in Dublin, the Government, prompted by a mania for uniformity between England and Ireland, passed a similar act relating to the Bank of Ireland.[2] No precise figures are available of the amount of notes issued by the Bank of Ireland during the next few years; but we know that it increased from about £600,000 in 1797 to £2,986,999 on the 1st January, 1804, while the issue of the Bank of England increased during the same period from 10 to 17 millions. The increased issue in Ireland was thus relatively very much greater than in England. The same period witnessed a complete revolution in the Irish exchange. Hitherto, as we stated, the exchange had always fluctuated around the par of $8\frac{1}{3}$, but it now began to move far beyond the limits within which it had formerly been confined. The following table shows the average exchange of Dublin on London during this period:[3] In January 1804 the exchange reached the altogether abnormal figure of 18 per cent.

This unusual state of the exchanges attracted considerable attention both in Parliament and in the country. In the House of Commons on 6th December, 1803, Lord Archibald Hamilton

[1] Foster, *Essay on Principle of Commercial Exchanges*, pp. 174–5. *Report of Select Committee on Circulating Paper*, etc., 1804, Appendix A 2.

[2] 37 Geo. III, c. 51, Irish. Andreades, *History of the Bank of England*, p. 214.

[3] *Report of Committee on Circulating Paper*, etc., 1804, Appendix A 1.

	£	*s.*	*d.*
1797	6	6	10
1798	8	8	5
1799	10	12	3
1800	10	7	4
1801	12	3	2
1802	11	3	3
1803	13	19	0
1804 (Jan.–March)	16	3	7

called attention to the state of the exchange and expressed the view that the Bank had abused its right of issue; and on 13th and 20th February, 1804, there was a full-dress debate on the subject.[1] In the House of Lords the matter was discussed on 5th March, 1804, when Lord King gave expression to the views which he had already stated in an important pamphlet to which we shall presently refer.[2] Meanwhile the House of Commons, on Mr. Foster's motion, had appointed a Select Committee to inquire into the subject.[3]

The interest that was taken in the exchange at this time is shown by the number of pamphlets dealing with it that were published. Here, as in Parliament, two schools of thought emerged: that which attributed the state of the exchange to the adverse balance of remittances, and that which attributed it to the depreciation of Irish bank paper. The former school paid much attention to the real state of Ireland's international indebtedness; and, while admitting that the trade balance was favourable to Ireland, attempted to prove that the value of external remittances was adverse owing to the increase of absenteeism and the raising of loans for Irish purposes in London. In other words, the discussion turned on the value of the invisible imports and exports, although, of course, those terms had not yet been coined. The adverse balance of remittances, it was urged, augmented the demand for means of payment in Ireland, and this demand was met by the creation of bank paper. The increased note issue was thus the effect and not the cause of the adverse exchange, and, far from being an evil, was the one thing that stood between Ireland and national bankruptcy. The undeniable fact that the value of the Bank of Ireland note was lower than that of the guinea was to be accounted for not by the depreciation of the former, but by the appreciation of the latter, which was bought and sold in Ireland like any other commodity. The remedies proposed by the writers of this school were aimed at redressing the adverse balance of remittances, either by encouraging exports and discouraging imports, or by creating credits in England upon which the Bank of Ireland could draw from time to time.[4]

[1] Cobbett's *Parliamentary Debates*, Vol. I. pp. 1082, 1101.

[2] *Ibid.*, p. 697. [3] *Ibid.*, p. 649.

[4] *A Letter to Lord King in Defence of the Conduct of the Banks of England and Ireland*, by Henry Boase, London, 1804. *The Real Causes of the High Rate of Exchange and the Only True Remedy*, Dublin, 1804. *Observations on the Exchange between London and Dublin*, by a Merchant of Dublin, Dublin, 1804. *A Letter from an Irish M.P. upon the Report of the Select Committee on Circulating Paper*, London, 1805. Somewhat similar views are expressed in an anonymous pamphlet

The protagonist of the other school was Lord King, whose pamphlet entitled *Thoughts on the Restriction of Payments in Specie at the Bank of England and Ireland* appeared in 1803. This writer was concerned primarily with the alleged depreciation of the Bank of England paper, and referred to the Irish exchange merely in corroboration of his conclusions on that subject. Having argued that the unfavourable state of the London–Hamburg Exchange was the result of over-issue of notes by the Bank of England, he proceeded to point out that there were only two exceptions to the unfavourable exchange which had prevailed between London and the Continent since 1799, namely, the exchanges on Lisbon and on Dublin. Both Portugal and Ireland had greatly augmented their paper issues during these years, and the same cause had therefore produced the same effect in the two countries. In proof that the Irish currency was, in fact, depreciated, Lord King pointed to the premium on the sale of guineas and to the excessively unfavourable exchange, and concluded that " the history of commerce does not afford a single instance of so great an irregularity in the exchange between any two countries except in the case of a depreciated currency." By way of remedy, he suggested that the Bank of Ireland should be deprived of the right of unlimited issue and should be bound to pay its notes in Bank of England notes on demand.

The same case was made by Henry Parnell in a singularly lucid pamphlet.[1] Parnell begins by pointing out the close relation that exists between over-issue and depreciation in the case of a paper currency. He then discusses the question of the alleged depreciation of Bank of England paper, and concludes that " whatever difference of opinion may have existed relative to the question as it affects the currency of England, there is no doubt that the currency of Ireland, as composed of Bank of Ireland paper, has suffered a most serious depreciation caused by an excessive issue of the Bank paper by the directors of the Bank of Ireland." Regarding the provision of a remedy for this evil, the author discusses the possibility of limiting the amount of

probably written by Wm. Jebb entitled *An Enquiry into the Depreciation of Irish Bank Paper: Its Effects and Causes and a Remedy Proposed.* This writer admitted that Irish bank paper was depreciated, but contended that the depreciation was caused by the adverse balance of remittances. He allowed, however, that " an excessive increase of the issue of paper must tend to increase the evil," and was of opinion that the best remedy for the unsatisfactory state of affairs would be the introduction of a large number of English notes into Ireland.

[1] *Observations upon the State of Currency in Ireland and upon the Course of Exchange between Dublin and London,* by Henry Parnell, Dublin, 1804.

the issue, but decides against this course as being "of a nature too hazardous and a restriction upon trade too grievous"; and finally recommends the amalgamation of the British and Irish currencies and the imposition of an obligation on the Bank of Ireland to pay its notes with Bank of England notes on demand.

John Leslie Foster followed on the same side. In his pamphlet [1] he demonstrates that the unfavourable exchange had exceeded both the limit of time and the limit of amount possible for an adverse exchange caused solely by an unfavourable balance of remittances, and must therefore be the result of some other cause. He then proceeds to enumerate the symptoms of a currency depreciated by excess as follows: "First, a high and permanent excess of the market price above the mint price of bullion; secondly, an open discount upon paper as compared with coin; thirdly, an exchange unfavourable to the country when computed in bank notes, yet possibly favourable when computed in specie; unfavourable in those parts of the country where the circulating medium is paper, yet possibly favourable, or at least much less unfavourable, to other parts whose circulating medium is specie; fourthly, an exchange between different parts of the same country where circulating media are different; fifthly, the entire disappearance of all the smaller coins which had been in circulation along with specie, but which cannot continue in circulation along with any other circulating medium of less value." He had no difficulty in showing that all these symptoms of depreciation existed in Ireland, from which he drew the indisputable conclusion that depreciation had, in fact, taken place. By way of remedy, Foster favoured the proposal that the Bank of Ireland should be bound to pay its notes on demand in English notes.[2]

The third and fourth class of symptoms mentioned by Foster call for a few words of explanation. At the time of the passing of the Bank Restriction Act the activities of the United Irishmen were in full swing in Ulster, where considerable disaffection against

[1] *An Essay upon the Principle of Commercial Exchanges*, London, 1804.

[2] The effect of the depreciation of the Bank paper on the exchange was fully appreciated by the anonymous author of *A Word of Advice to the Trading and Monied Interests of Ireland upon the Momentous Subject of the Alarming Scarcity of the Smaller Denominations of Silver Coin*, Dublin, 1804; and by the Earl of Lauderdale, who wrote two pamphlets on the subject entitled *Hints to the Manufacturers of Great Britain on the Consequences of the Irish Union*, and *Thoughts on the Alarming State of the Circulation in Ireland*, both published in Edinburgh in 1805. The excessive issues of private banks is suggested as the cause of the adverse exchange in *A Candid Cobbler's Cursory and Critical Conjectures upon Exchange and Small Change*, etc., Dublin, 1804. This was, of course, absurd, as all private issues were payable on demand in Bank paper.

the Government prevailed. It was widely thought in the north that to refuse to accept Bank of Ireland paper would embarrass the authorities in Dublin, and the result was that specie continued to circulate in Ulster long after it had disappeared from other parts of Ireland.[1] The existence of the sounder currency had its natural effect on the exchange, and for several years the exchange from Belfast on London was more favourable than that of Dublin on London. In Newry, where the two currencies met, two rates on London, the specie rate and the paper rate, were quoted.[2]

The simultaneous existence of two rates of exchange from different parts of the same country was obviously a most unusual occurrence. It gave rise to the extraordinary feature of a rate of exchange from Dublin on Belfast. Foster says that such an exchange existed all during the period that the English exchange was unfavourable to Dublin [3] and the same fact is attested by Lord King [4] and by Henry Parnell.[5] As one approached the north from Dublin, one found it more and more difficult to induce shopkeepers and others to accept Dublin banknotes or silver tokens, and when one passed further north than Newry such notes and coins were practically everywhere refused.[6] Throughout Ulster two prices were quoted for commodities, the gold price and the paper price.[7] A good deal of hardship was caused to the weaker members of the community by this double currency, because the economically stronger members, such as landlords, agents and tithe proctors, contrived to be paid in gold and to pay their own wages and tradesmen's bills in paper.

One would have thought that the phenomenon of the Dublin–Belfast exchange would have been accepted as a final proof of the relation between the over-issue of Bank of Ireland paper and the state of the English exchange. Between Ulster and the south of Ireland there could be no question of balance of trade or balance of remittances; and yet it appeared that the area where the Bank of Ireland paper circulated suffered from an adverse exchange on the area where specie was still in circulation. Indeed, in view of the fact that the Belfast–London exchange was actually favourable, it was possible to infer, as Foster pointed out,[8] the depreciation not only of the Irish but of the English bank paper. Currency theory was, however, at that

[1] Parnell, *op. cit.*, p. 24.
[2] *Report of Committee on Circulating Paper*, etc., 1804, Appendix M.
[3] *Op. cit.*, p. 123. [4] *Op. cit.*, p. 49. [5] *Op. cit.*, p. 25.
[6] Jebb [?], *op. cit.*, pp. 16–17. [7] Foster, *op. cit.*, p. 12 n.
[8] *Op. cit.*, p.128.

time comparatively undeveloped, and a very large and respectable body of opinion still continued to attribute the unfavourable exchange to the adverse balance of remittances.

The widespread prevalence of this erroneous opinion was clearly shown by the evidence given before the Select Committee of the House of Commons, to the appointment of which we have already referred.[1] The Committee, however, showed great independence of mind and arrived at conclusions opposed to the views urged upon it by the majority of the witnesses whom it had heard. It found that the real balance of remittances (including, as we would say to-day, all the invisible items) was in favour of and not against Ireland, and that, therefore, if this were the deciding factor, the exchange should also be favourable to Ireland. Some other factor must consequently be sought for, and this, in the Committee's opinion, would be found by examining the paper issues of the Bank of Ireland. Prior to 1797, it was pointed out, the exchange had been regularly favourable to Ireland, whereas since that date it had been uniformly adverse. Was this a case of *post hoc* or of *propter hoc?* The Committee had no hesitation in deciding that the Bank had abused its privilege by a serious over-issue, as a result of which the Irish currency had become depreciated and the exchange rendered unfavourable. The depreciation had the effect, in the Committee's own words, of " enhancing the price of all the necessaries of life and of all manufactures, encouraging the circulation of base and counterfeited metal, and driving out of circulation what little good silver had been in it; and above all, of keeping up high and unexampled rates of exchange against the kingdom." [2]

The only complete and lasting cure for the evil state of affairs was the repeal of the Bank Restriction Act, but the Committee dismissed this course as not immediately practicable. The union of the Banks of England and Ireland was also pronounced impracticable. The Committee was strongly in favour of making Bank of Ireland notes payable in notes of the Bank of England, and made suggestions as to the way in which a fund might be created in London upon which the Bank of Ireland could draw. The loans about to be raised in England for Irish purposes were indicated as a " ready, adequate and effective fund " for this purpose. The Committee recommended that these loans should be managed by the Bank of Ireland instead of the Treasury, and

[1] *Report from the Committee on the Circulating Paper, the Specie and the Current Coin of Ireland; and also on the Exchange between that Part of the United Kingdom and Great Britain,* reprinted in *Parliamentary Papers,* 1826, Vol. 5.

[2] *Report,* p. 9.

that immediate measures should be taken with the Bank of Ireland for the purpose. The Bank of Ireland should be empowered to invest in the Bank of England whatever surplus of specie it had in its coffers over and above what it was allowed by law to issue and what a due consideration of the circumstances of Ireland might show it necessary or prudent to keep. Other means suggested for aiding the Bank of Ireland to create funds in London to draw upon were the empowering of the Government to issue Treasury bills to the Bank not to be made use of except when necessary to support the latter's credit, and the enlargement of the Bank's capital. The issue of paper by private bankers should be controlled by a strict enforcement of the laws relating to registration and stamp duties. The Committee expressed the belief that these measures would soon restore the exchange, provided, of course, that the Bank directors did not again make an over-issue of paper, and regulated the issue by the same principles as if no restriction of cash payments existed. The Report concluded by recommending that, as soon as the exchange became restored to par, the currencies of England and Ireland should be amalgamated, and the old Irish penny abolished.[1]

This Committee, which included many of the leading statesmen of the day, was the first body of its kind ever appointed by the British Government to make an inquiry into the paper currency.[2] In 1810 the Bullion Committee presented its Report, which has become deservedly famous and ranks as a classic in the literature of finance. Yet the earlier Irish Report "dealt with similar facts, stated the same theories, and drew the same conclusions" as the later and more famous Report of the Bullion Committee.[3] The fact that one Report dealt with Ireland while the other dealt with the infinitely more important matter of the British currency probably accounts for the obscurity of the former and the fame of the latter; but there is no gainsaying the fact that the just and indisputable doctrines embodied in the Report of the Bullion Committee were all to be found, though possibly not so elegantly expressed, in the Report of 1804.

Several of the recommendations of the Committee were tardily followed. The Irish Treasury announced that, after the 3rd of December, 1804, it would draw on London for all sums over ten pounds at the rate of $11\frac{1}{2}$ per cent. as long as the available

[1] *Report*, p. 14.

[2] Macleod, *Theory and Practice of Banking*, Vol. II. p. 9. Andreades, *History of the Bank of England*, p. 214.

[3] Andreades, *op. cit.*, p. 220.

fund remained unexhausted.[1] In 1805 the issue of notes for sums under one pound was forbidden, and in 1808 the Bank of Ireland was authorised to increase its capital by a million pounds and was entrusted with the management of the public debt.[2] The act which provided for the consolidation of the British and Irish Exchequers provided that as from the 5th January, 1817, all Treasury and revenue accounts should be stated in British currency.[3]

The publication of the Committee's Report seems to have influenced the directors of the Bank of Ireland. Between January 1804 and January 1806 the note issue was gradually reduced by 20 per cent., and all silver tokens were suppressed. The Irish exchange was restored to par, and was in favour of Ireland in 1809. The time had now arrived when the Committee's most important recommendation, namely, that the currencies should be assimilated, could be carried into effect. A motion in favour of this course was proposed by Mr. Parnell, but was negatived without a division.[4] The Bank afterwards relapsed into evil ways, and the exchange during the years 1812–15 was once more in the neighbourhood of 18 per cent., having on one occasion touched 20 per cent. In the years 1816–19 the circulation was gradually reduced in anticipation of the cessation of the Restriction Acts.[5] Provision was made for the resumption of cash payments in 1819,[6] and thenceforth the exchange, during the few remaining years of its existence, was anchored in the neighbourhood of par.

The work of the framers of the Act of Union was finally completed in the decade 1816–26. The consolidation of the Exchequers and the abolition of the Union duties took place between these years, and it was impossible at a time when the passion for assimilation and uniformity were so strong that the Irish currency would be permitted to survive. An Act of 1825 [7] provided that as from the 1st January, 1826, the English system of currency should prevail in Ireland. The change was carried through with very little inconvenience or friction. The Bank of Ireland had

[1] Lord Lauderdale, *Hints to the Manufacturers of Great Britain on the Consequences of the Irish Union*, Edinburgh, 1805.

[2] 45 Geo. III, c. 41; 48 Geo. III, c. 103.

[3] 56 Geo. III, c. 98, s. 26.

[4] Cobbett, *Parliamentary Debates*, Vol. 14, p. 75. Report of Bullion Committee, 1810.

[5] Evidence of Mr. Culley before the *Royal Commission on International Coinage*, 1868, pp. 104–5; Kelly, *The Universal Cambist*, 1821 ed., Vol. I. p. 195.

[6] 59 Geo. III, cc. 49 and 99.

[7] 6 Geo. IV, c. 79.

to alter all its balances and all the balances standing to the credit of parties in the Government funds, and all unpaid and unclaimed dividend dockets that had accumulated for twenty or thirty years. So expeditiously was this gigantic accounting operation performed that every holding in the public funds and every current account was balanced in the new currency on the very day that the change took place.[1]

Among the mercantile and trading classes the change was scarcely felt and all the necessary adjustments were made in two or three days. Among the working classes there was a little difficulty, because retail prices were not immediately adjusted, and the working man found that he did not get any more for his 3*d.* or 4*d.* British than he had got for his 3*d.* or 4*d.* Irish. In small retail transactions the shopkeeper naturally had an advantage over his working-class customers, but any maladjustments or injustices that were experienced disappeared within twelve months. The people clung to the old coins with which they were familiar so tenaciously that on July 12th, 1826, a proclamation was issued declaring that the old copper money should thenceforth be current at the same rate of twelve pence to the shilling. The willingness of the people to use the new currency was stimulated by the issue of a new and brilliant coinage from the mint.[2]

GEORGE O'BRIEN

[1] Mr. Culley's evidence in *loc. cit.*

[2] Evidence of Mr. Culley in *loc. cit.*: *First Report of Decimal Coinage Commission*, 1857, Appendix No. 17. *Final Report of Decimal Coinage Commission*, 1859, evidence of Sir Richard Griffith, p. 90.

THE ORIGIN OF COTTON FUTURES

The legend of the magic birth of cotton futures at the close of the American Civil War is long in dying,[1] and it is time, perhaps, for the early history of the futures market to be stated as faithfully as available records permit. The story centres round the improvements in means of communication which were adopted in the middle of the nineteenth century; it is crammed into a period of less than twenty years and is necessarily replete with incident. So long as cotton and news travelled across the sea at the same pace there could be no volume of dealings except in cotton on the spot. But as soon as the mail steamer, carrying letters and samples, outstripped the sailing ship with its cargo of cotton, that cargo could be bought and sold while still at sea. The gradual extinction of the sailing ship would have eliminated the time interval which made that practice possible, but in the meantime the telegraph came to magnify and perpetuate the difference between the transmission of news and the shipment of cotton.

Therefore there are several phases of development: the coming of the mail steamer; the inauguration of telegraphic communication between New York and Halifax, where the steamer from England first touched; and between New York and New Orleans, the chief cotton market of America; the gradual extension of the cable service between England and India; and, finally, the successful completion of the Atlantic cable.

The existence of a market in "transit" or "arrival" cotton at New York dates at least from 1851.[2] Its development was due to the rapidity with which news could be transmitted, as compared with the slower movement of goods, and to the special facilities possessed by New York for turning that situation to its advantage. The shipment of cotton was slow, the waiting of the sailing vessel for its full complement only less tedious than its voyage across the Atlantic. On the other hand, the mails were now carried by steamer, and, since the steamer touched first at Halifax, telegraphic communication both with

[1] Cf. W. H. Hubbard, *Cotton and the Cotton Market*, p. 204; E. Brown, *Marketing*, pp. 274–5.

[2] *Economist*, Nov. 29, Dec. 6, 1851.

Halifax and New Orleans made the New York market the most sensitive to any changes affecting either demand or supply. Dealings in cotton "to arrive" or "in transit" represented a gain in mutual advantage to the Northern merchant and the Southern shipper—the one was able to make use of his information and the judgment based upon it; the other was enabled to rid himself of risks which would otherwise have hung upon him until the cotton was sold at Liverpool or elsewhere. The arrangements were simple: when cotton was loaded, samples were sent to New York and there offered for sale on the owner's guarantee that the bulk would agree with the sample. If the offer was not taken up in New York the cotton went forward to its European destination on the owner's account. And this system grew out of the still simpler process of selling in advance cotton that was actually shipped to New York from the Southern ports.

Although Liverpool was acquainted with the nature of this business on the New York market, there seems to have been no hurry to copy it. This for a twofold reason: Liverpool did not possess the same opportunities as New York, for the interval between the market and the sources of supply was too great; and the innovators of such methods were pure speculators whose practices were frowned upon by the more reputable merchants and brokers. Nevertheless, events conspired to bring about, even at Liverpool, an extraordinary increase of dealings in cotton "to arrive." The partial development of telegraphic connection with India just preceded 1857, the year of the American panic and of the Indian Mutiny, and gave to a demoralised cotton market new facilities for speculation. The year began with a prospect of short supplies of cotton from America which led to large sales of East Indian cotton still at sea. A great proportion of this cotton came on the market in the autumn when the panic was at its height; the purchasers were unable to re-sell the cotton or to negotiate advances, and it was eventually forced off on a depressed market at ruinous prices.[1] It was a salutary lesson for the speculators and their interest waned. "Whether it is from the little encouragement which they have had of late," runs a broker's circular of 1859, "or that their recollections of the panic of 1857 are still too vivid, it is difficult to say, but speculators in cotton to any extent do not exist, and the machinery through which they operated appears to be out of order."[2] On the other hand,

[1] Haywood and McViccar's Circular, Dec. 31, 1857.
[2] Thornely and Pownall's Circular, Dec. 30, 1859.

the American Chamber of Commerce in Liverpool had already found it necessary to issue the following statement :

> " Whereas the Sales of Produce ' to arrive ' involve risks other than those incurred in the ordinary course of business,
> *It is unanimously resolved—*
> ' That in Sales " to arrive " of Cotton or other Produce from the United States, the Seller does not agree to guarantee such Sale unless he decides to deliver the Goods upon their arrival to the Buyer of the same.' " [1]

This action is of some significance, because the acceptance of the principle of buying back arrival contracts was necessary to the later birth of " hedging."

During the lull in speculation, more direct telegraphic contact with India was established. An interested broker comments thus : " On 10th June the Wires worked from Aden and on the 26th November Liverpool had news from Bombay of 12th November—thus the Telegraph makes constant progress thitherwards." [2] The way was open to the far greater wave of speculation which marked the period of the American Civil War.

From 1861 the mania for gambling in cotton grew with cumulative rapidity. The current price of East Indian cotton in 1860 was from 4*d.* to 5*d.* per lb., and of American from 7½*d.* to 8*d.*; while speculation proceeded in 1863 on a basis of 30*d.* for American and 25*d.* for East Indian. Small wonder that the anticipation of larger and larger profits drowned any fear of a sudden decline in prices. The purchase of cotton " to arrive " had hitherto been confined to that already shipped or about to be shipped. Now, however, the continued prospect of soaring prices induced the buying of cotton for shipment in distant months. During the last months of 1863 parcels were bought to arrive during the first six months of 1864.[3] Even more reckless did the operators become in 1864 when the mania reached its highest pitch.[4] The inevitable reaction took place in the autumn, a reaction stimulated by rumours of peace from New York, by very large arrivals of cotton which had been bought at extravagant prices, and by the stringency of the money market, in which a discount rate of 9 per cent. ruled. In consequence, there was a rapid drop in prices of 6*d.* to 7*d.* per lb. within three weeks,

[1] Stolterfoht, Frost & Co.'s Circular, March 26, 1858.
[2] Samuel Kearsley & Co.'s Circular, Dec. 30, 1859.
[3] M. Williams, *Seven Years' History of the Cotton Trade of Europe* (Liverpool, 1868), p. 51.
[4] *Ibid.*, p. 69.

which, in spite of a later recovery, had the effect of quietening the speculators and minimising their activities for several months. With the conclusion of the war, business tended to return to a more normal basis. Distant deliveries were well enough so long as cotton might profitably be unloaded on the market no matter what its quality, but with more exact requirements to be satisfied the previous system made a reappearance, by which cotton was sold which was about to be cleared or actually afloat, so that the ship could be named, the quality guaranteed, and the marks given.

In August 1866 the Atlantic cable was successfully laid, and market methods had to be adjusted to the new conditions. The first effect was to increase considerably the amount of buying and selling afloat, sufficient evidence of which is given by the publication from that time onwards of a daily report on the arrival market in American and Indian cotton. The second result, the growth of trading in forward deliveries, came more slowly and was prompted not only by the realisation of the closer union of the English and American markets, but also by the poverty-stricken condition of the South.[1] During 1867, alongside the dealings in arrival cotton there came a considerable degree of trading for shipment or future delivery. For a time this implied nothing more than the older business of selling cotton to arrive in near months, save that what was formerly done recklessly and ignorantly was now done deliberately and advisedly; the rapid conveyance of information maintained a proper relationship between "spot" and "future" prices, and the sale was made on the basis of an agreed quality.

New York adjusted itself more rapidly than Liverpool to the new position. New York was already infected by the new methods of trading emanating from the Chicago grain market; but New York was not a great spot market nor was it bound by long years of custom. The importance of Liverpool consisted in the size of its spot market; its outlook was conservative and innovations were accepted with reluctance. The Liverpool Cotton Brokers' Association had managed without rules or committee from 1841 until 1863, but the confusion of the war years forced the Association to prescribe for itself a constitution and a gradually increasing number of rules and bye-laws. The rules of 1863 provided only for the election of officers and the holding of meetings. Not until the publication of the rules and bye-laws

[1] M. Williams, *Seven Years' History of the Cotton Trade of Europe* (Liverpool, 1867), p. 18.

in 1869 was the body of regulations relating to cotton "to arrive" collectively issued.[1] These rules provided for the proper delivery of the cotton, for procedure in case of loss or damage, for payment, for arbitration in case of dispute, and for appeal. It is significant that account is taken of dealings in the actual shipment of cotton alone; in evidence whereof the following quotation is important:

> "In all cases when the terms are by ship or ships the marks of the Cotton must be declared to the buying Broker (unless specified to the contrary) within the following times next after the date of shipment named in the contract; viz.:
>
> If from an East Indian port, within six weeks.
>
> If from a North or South American port, within four weeks.
>
> If from a Mediterranean or European port, within three weeks. . . ."

The edition of the rules and bye-laws of 1871 repeats for the most part those of 1869. The most noticeable amendment relates to the rule just cited, which appears in this form:

> "In cases when Cotton shall be tendered under a contract for delivery on or before a given date, the seller must at the time of the tender be able to give the buyer immediate delivery of the Cotton. Whenever Cotton is sold per ship or ships, or for shipment before a given date, the name of the ship or ships, and the marks of the Cotton, if not previously declared, shall be given in writing by the selling to the buying Broker before noon of the day but one after a written application shall have been made to him by the buying Broker after the expiration of the following periods . . .
>
> [as in 1869]
>
> . . . after the *month* named in the contract, or if more than one month is named, then after the *actual month of shipment;* and whenever a ship's name is given on the contract the marks of the Cotton, if not previously declared, shall be in like manner, and upon similar application, be given after the expiration of the above stated periods from the date *of the contract.*"

Plainly there were various forms of contract in use by 1871

[1] *Constitution, Laws and Usages of the Liverpool Cotton Brokers' Association,* 1869.

even under the official designation, which still persisted, of "cotton to arrive." There were specific contracts offering cotton by definite sailings. There were also general contracts providing for shipment in one of two named months.[1] A necessary correlative of the general contract was the basis clause; "basis middling," or "basis middling, nothing below low middling," appears with frequency in arrival quotations from 1869. Nor was this general contract merely a development of the older practice of selling for future months. It was needed for the covering of ordinary transactions, and its elastic nature was well adapted to that purpose. Merchants and spinners could buy and sell the general contract as they thought fit, replacing it later when it had fulfilled its object by the particular grade of cotton required. In other words, the general contract was used for "hedging," and it is necessary to turn back to discover how the procedure had been evolved.

The interest of outside speculators in cotton to arrive had revived after the war. Their eagerness to buy for a rise in price made them even willing enough to offer a premium to secure sufficiently distant delivery. Brokers would therefore sell these promises of delivery, trusting that an actual tender would not be required, or that, at the worst, they could buy in the cotton at lower prices before the time for delivery.[2] It was but a short step further to make the practice entirely safe by selling deliveries and buying cotton against them in America on c.i.f. contracts, so that in such a case the broker gained a profit "all the time his drafts were maturing and his cotton sailing . . . from the simple reason that as the distant months approached the premiums disappeared, and he was able to hold his cotton so much longer for a full price, and finally declare it on his original sale in case of need."[3] This was taking place in all probability between 1868 and 1869. It was not long before it was realised that the spinner could protect himself in this way, equally with the importer; that he could safeguard himself by

[1] The following is a typical market report of the time: "The market continues dull and irregular at a general decline of $\frac{1}{4}d.$ per lb. from last week's quotations. To arrive: American, basis of middling, from any port, October–November shipment, $9\frac{9}{16}d.$; Charleston, ship named, not below good ordinary, $9\frac{7}{8}d.$; New Orleans, June–July shipment, $10d.$ $10\frac{1}{16}d.$; ship named, not below good ordinary, steamer, via New York, $9\frac{3}{4}d.$; Dhollerah, fair new merchants, Cape or Canal, May–June shipment, $8\frac{1}{2}d.$; Cape, May–June, $8\frac{1}{4}d.$; May, ship named, $8\frac{5}{8}d.$ Estimated sales 10,000 bales, including 2000 on speculation and for export."—*Liverpool Mercury*, July 1, 1870.

[2] P. E. J. Hemelryk, *Forty Years' Reminiscences of the Cotton Market*, p. 16; Stolterfoht, Sons & Co.'s Circular, Jan. 22, 1869.

[3] Hemelryk, p. 16.

buying contracts for future delivery just as the merchant could by selling them. Hence arose the use of the general contract for "hedging" purposes.

It was fortunate for the establishment of the whole system of arrivals and future contracts that the attitude of the law was one of benevolent neutrality. In *Bryan* v. *Lewis* in 1826 it had been declared that "If a man sells goods to be delivered on a future day, and neither has the goods at the time nor has entered into any previous contract to buy them, nor has any reasonable expectation of receiving them by consignment, but means to go into the market and buy the goods which he has contracted to deliver, he cannot maintain an action upon such a contract. Such a contract amounts on the part of the Vendor to a wager on the price of the commodity and is attended with the most disastrous consequences." This decision was overruled in 1839 in *Hibblewhite* v. *McMorine*, it being then held that Lord Tenterden's declaration had been "against law and against mercantile convenience." Left to itself, the commercial community followed the line of least resistance; like Topsy, the futures system just "growed."

But its growth was not altogether untrammelled. Many merchants looked with disfavour upon "these objectionable gambling practices," [1] and a concerted assault was launched by merchants and spinners in 1870.[2] The attack was directed against contracts for future delivery (contracts for cotton to arrive—properly so called—being specially excepted) on the ground that little or no capital was required and that people who had nothing to lose were induced to engage in them. The critics gained one point at least, namely, a common agreement to make mutual deposits.[3] The agreement was voluntary in 1870, but was formally recognised by the Cotton Brokers' Association's rules of 1871, the insertion of a deposit clause on the face of the contract being then required. Subsequent growth was not eventful. Even the manufacturers had from time to time entered into engagements for the future delivery of their goods,[4] and they would be the readier on that account to appreciate the possibility of safeguarding the price of their raw material.

It is to be regretted that the statistics given in the Liverpool market reports for the period do not permit of any estimate

[1] Stolterfoht, Sons & Co.'s Circular, Jan. 22, 1869.
[2] *Liverpool Mercury*, July 14, 1870.
[3] Stolterfoht, Sons & Co.'s Circular, Sept. 23, 1870.
[4] Williams, *op. cit.*, p. 33; *Economist*, March 13, 1869.

being made of the increase in future trading. Until after 1870 the custom still obtained of distinguishing only between sales "on speculation," "for export" and "to the trade." At New York, however, market reports supplied some account of the business in futures from 1868. The subsequent growth was remarkable, especially so after September 1870, when the New York Exchange was organised for future trading.[1]

Monthly Sales for Future Delivery, New York [2]

The rapidity of development at New York is evidenced by the appearance in a broker's circular of 1870 of a full explanation of the method of working and of the advantages of "puts" and "calls" and of "futures." "By the term 'futures' is meant cotton sales and purchases for future delivery, which are daily made here by parties of the highest respectability whose contracts are made valid by the deposit of cash in bank as margin, which is held in trust until the contract is made. . . . The system of dealing in 'futures' is new to cotton operators and has been denounced by superficial observers only because it is new. We are inclined to believe that it will prove very beneficial to the cotton planter, the spinner, the factor and the general operator. By it the planter can sell his crop, before he puts the seed in the ground, at a price which may be remunerative, and thus be relieved of that terrible uncertainty for his hard-earned products, which uncertainty in price really makes cotton-planting one of the most hazardous speculations of the times. The spinner may purchase his supply of the raw material

[1] Part of the expansion may be accounted for, of course, by the fuller reporting of sales after that date.

[2] The figures for 1869 are collected from the weekly reports on the New York market issued by the *Economist*, and are incomplete for five weeks of the year. Those for 1870 and 1871 are taken from W. B. Dana, *Cotton from Seed to Loom*, New York, 1878, p. 193.

	1869.	1870.	1871.
Jan.	8,700	50,167	219,375
Feb.	3,150	66,608	241,450
March	8,600	98,342	447,700
April	1,500	39,722	153,690
May	1,450	70,175	350,183
June	5,850	67,233	351,450
July	16,590	51,401	273,000
Aug.	20,500	48,883	327,600
Sept.	24,581	89,883	350,750
Oct.	24,325	200,585	450,350
Nov.	36,283	189,205	343,314
Dec.	65,255	237,125	370,050

months ahead, and then make his contracts for goods at remunerative prices. The factor may be guaranteed so many bales for advances in the spring, and sell sufficient to be delivered the following season to cover said advances, if he thinks advisable to do so. . . ."

Such was the case put forward by Messrs. Ware, Murphy & Co. of New York in June 1870. The orthodox modern text-book says just as much—and just as little!

STANLEY DUMBELL

THE CHANGE IN FARM LABOURERS' DIET DURING TWO CENTURIES

The general welfare of the labouring class is usually said to be superior to-day to what it was in earlier times. Among the considerations urged in support of this view are instanced the commodities imported from different parts of the world which have become everyday necessities in our civilisation. In common with most ready generalisations, the more closely this is examined the more unreal do the advantages claimed seem to be. It is true that the modern farm labourer has the doubtful advantage of using coffee or cocoa, that his ration of sugar has increased, and that he does eat a modicum of syrup, treacle or jam, but, as Mrs. Pember Reeves says of certain urban workers' dietary, "the tiny amounts of tea, dripping, butter, jam, sugar and greens may be regarded rather in the light of condiments than of food." [1] When an examination is made of the quantities of such foods actually consumed in a week by the standard man of economic theory,[2] the truth of her statement becomes obvious. A close examination of the table appended to this paper leads to the deduction that the only real advantage in the matter of food which the labourer of to-day has obtained over his ancestor of two hundred years ago is to be found in the item of potatoes. His ancestor's dietary has been improved upon by a quantity of this vegetable about equal to the quantity of bread normally eaten.

The earlier columns of the table are much less comprehensive than the later, but they do not include every article of food consumed by the labourers of the earlier period. The evidence I have been able to gather is conflicting and intermittent. Every investigator is aware of the contradictory opinions held by the pseudo-investigators of the eighteenth century, founded, as these opinions so often were, upon what the pamphleteers and writers

[1] *Round about a Pound a Week*, 1913, p. 103.

[2] Some uniformity in the size of agricultural labourers' families seems to exist. Taking a man, his wife and four children as the average family (see *Reasons for the Late Increase in the Poor Rates*, 1777, Cd. 2376, 1905, and Cmd. 76 1919), the number of standard units in each becomes 3·8, the figure used in this paper. A woman is taken as 0·8 man, and each child as 0·5, in accordance with the principles laid down in the Parliamentary Papers cited.

of the time wished to believe rather than upon the actual facts. Although a large amount of detail is to be found in the works cited, that detail is frequently of no serious use from a statistical point of view. It is of very little service for making a comparison with the accurate data provided by Mr. Wilson Fox. For instance, to learn that workhouse inmates at Bristol received three meals a day in 1700, and that the diet of girls was of a very mixed character,[1] so far as that was understood in those times, does not provide any definite information.

Again, it has only been possible to make an accurate statement in respect of some parts of the dietary allowed in the workhouses at St. Mary's Whitechapel in 1725. In addition to the items specified in the table, the paupers were fed with milk-porridge, peas-porridge, beef broth or burgow.[2] This is a City institution, but a similar dietary was common to all the workhouses which this anonymous writer discusses, and it is quite clear that a large and substantial proportion of the food was bread. Here it may be observed that the earliest rations are to be discovered in accounts of workhouses. There does not seem to be any budget of a working labourer, outside the workhouses, before the estimate dated 1737 in the table, and said by the writer of *Reasons for the Late Increase in the Poor Rates* (1777) to apply to a period forty years before his book was published. These estimates seem to be slightly generous. So far as they go, they are almost equal to the rations allowed to the Navy in 1765,[3] of which Dr. Moffitt says :[4] " Physicians of the time were of the opinion that the allowance was all that any able working man could consume with health. But it is doubtful if any able working man in either north or south, unless a servant with some generous farmer, ever had the opportunity of making the experiment."

In the comparatively numerous writings of the eighteenth century which deal with the production of corn, it was usual to assume that the healthy labourer consumed a quarter of wheat per annum. Larger quantities of barley and rye were consumed by those who lived in the counties where these crops were grown for food, but so far as wheat was concerned, it was definitely understood that a quarter was required by each adult labourer.

[1] *An Account of the Proceedings of . . . Bristol . . for the better Employing and Maintaining the Poor of that City*, John Cary, 1700, p. 12.

[2] *An Account of Several Workhouses for employing and Maintaining the Poor*, 1725.

[3] *Museum Rusticum*, March 1765, cited by Dr. Moffitt.

[4] *England on the Eve of the Industrial Revolution*, 1925, p. 123.

This quantity of wheat I have estimated to provide 8·6 lbs. of bread per week. I have arrived at this amount by assuming, in common with Maitland,[1] that 72 per cent. of flour was obtained in grinding wheat, and that the weight of flour is increased by one-third in the process of baking.[2] Judging by its consistency with such other figures as I have been able to discover, this result does not seem far out, although it yields less bread per head per week than is estimated to have been commonly consumed in the latter part of the century. On examination of the Labour Statistics [3] it will be found that the *per capita* consumption of wheat in the United Kingdom for the years 1901 and 1911 was 5·6 and 5·7 bushels respectively, a lower general average than that of the particular class. Still, throughout the two centuries the labourer's consumption seems to have been definitely somewhere in the neighbourhood of 10 lbs. per week, so that the effect of civilisation does not seem to have increased that part of his food to any noticeable degree. About 1863 it is said to have been larger, but the amount of meat is smaller, a characteristic of a time of low wages, and a point to which I shall return.

Flesh food is best considered from the point of view of the total meat consumed. The various budgets and menus deal sometimes with beef, mutton, pork and bacon, but they do not always discriminate very clearly between the different classes of meat eaten. There is not very much variation in quantity. The pauper of 1725 who received 2 lbs. 4 ozs. per week was in an exceptional position, since most of the other eighteenth-century estimates point to a consumption of less than 2 lbs., and often indicate a week's supply at a quantity much nearer 1 lb. The only exception is the workhouse at Shrewsbury, where each adult inmate was allowed 2 lbs. 13 ozs. This supports my belief that the occupants of the houses of industry at the end of the eighteenth century, if not at the beginning, were in better circumstances than their brothers who did their utmost to keep outside these pleasant institutions.

In the early years of the twentieth century the average consumption of the standard man seems to have been about 1·9 lbs., which fell to 1·7 lbs. in 1912. It had declined to 1·1 lbs. in 1918, no doubt in some measure because of the food rationing regulations of the war period.

[1] *Domesday Book and Beyond*, 1897.

[2] Cmd. 76 (1919), Agricultural Wages Board Report . . . Cost of Living of Rural Workers.

[3] Abstract of Labour Statistics, 1915 (Cd. 7733).

Eighteenth-century workhouse inmates received a ration of cheese. This was often very small; and the average family of an agricultural labourer, his wife and four small children, whose budgets for 1737 and 1777 are compared, used cheese as an alternative to butter,[1] while Davies states definitely that he was informed that "poor people reckon cheese the dearest article they can use." [2] On examination of the later statistics we find that ·4 of a lb. was consumed in 1863, and that this quantity steadily declined until 1918. In the later dietaries small quantities of oatmeal and rice, lard, margarine or dripping, of syrup, treacle or jam and other little extras can be found.

In 1700 and 1725 we find that the workhouses provided broth, peas-porridge, milk-porridge, cabbage, carrots, turnips, etc., and that it was a commonplace of their dietaries to provide vegetables as the season affords; but these small luxuries are comparable to the equally small luxuries of the modern dietary.

There is one item that is not discernible in any quantity in the eighteenth-century dietaries, and that item is the one upon the acquisition of which the modern labourer can compliment himself, if he finds any satisfaction in doing so. It is the potato. So early as 1863 we find the standard man consuming 7 lbs. of potatoes per week. In 1902 and 1912 the consumption had slightly decreased, but, with the food restrictions of the war, and the difficult situation in which most people found themselves, the consumption of potatoes had risen to nearly 8 lbs. per week in 1918. This is the accession of luxury made by the average farm labourer in the two hundred years, during which the most marked progress has been made, and all the facilities for rapid transport have been acquired. An interesting comparison between the situation of the farm labourer and that of the average man can be made by taking the *per capita* consumption of meat for the years 1901 and 1911 from the Labour Statistics.[3] In the two selected years this was respectively 136·2 lbs. and 127·2 lbs., an average of 2·6 lbs. and 2·5 lbs. per week, rather more than $\frac{1}{2}$ lb. greater than the average consumption of the labourer.

There is another point worthy of comment, although perhaps not very important. In the early part of the eighteenth century a very light beer was commonly drunk. We find this distributed in the poor-houses at the rate of one pint per meal or one quart

[1] *Reasons for the Late Increase in the Poor Rates*, 1777.
[2] *The Case of the Labourers in Husbandry*, David Davies, 1795.
[3] Abstract of Labour Statistics, 1915 (Cd. 7733).

per day, and we find it figuring in the dietary of the labourers of the north as well as in the south, although the former were in the habit of using milk for their porridge. This light beer had disappeared from the budget of the labourer by the end of the eighteenth century, and in modern times we find it substituted by a smaller amount of milk, presumably used with the almost minute quantities of tea or cocoa.

The advantages of civilisation seem to have passed over the head of the agricultural labourer. It is perhaps not to be expected that a greater bulk of cereal foods would be consumed by the modern labourer than was eaten by his ancestors. Men's stomachs are no larger to-day than they were some 225 years ago, but it might reasonably have been anticipated that the farm labourer's diet of to-day would prove more varied and appetising than it was so long ago.

It may be imagined that besides buying the best and most satisfying food his spare income will afford, the farm labourer eats so large a proportion of bread because he finds it the most suitable diet for his arduous work. An investigation into the "Consumption and Cost of Food in Workmen's Families" was carried out by the Board of Trade in 1903 [1] and 1904,[2] and the evidence then adduced does not confirm the idea of choice on the part of the farm labourer. This evidence is composed of averages obtained from families on different levels of income, taken at each 5*s.* rise between under 25*s.* and 40*s.* and upwards a week. The Memoranda show that the expenditure on bread "does not increase with the size of the income," [3] and that in the case of incomes below 25*s.* the expenditure on bread and flour forms about 21 per cent. of the total spent on food; for incomes between 35*s.* and 40*s.* the proportion is 15 per cent.[4] The expenditure on meat follows the directly opposite course. The earlier Memoranda, the reliability of which is impugned by the undue proportion of returns obtained from London, says: "The figures show that as the income increases, the expenditure on meat also increases . . ." [5] while the later, which takes its results from a much larger number of more uniformly distributed returns, confirms the tendency in the words: "The expenditure on meat, bacon and fish is seen from the table to vary fairly in proportion to the income, in this respect contrasting with the

[1] British and Foreign Trade: Memoranda, etc. (Cd. 1761), 1903.
[2] British and Foreign Trade: Second Series of Memoranda, etc. (Cd. 2337), 1904.
[3] Cd. 1761, p. 213. [4] Cd. 2337, p. 6. [5] Cd. 1761, p. 213.

Farm Labourer's Weekly Dietaries: 1725–1918.

Item.	1725.[1]	1737.[2]	1755.[3]	1765.[4]	1774.[5]	1777.		1784.[5]	1785.[5]	1795.[7]	1795.[8]	1797.[9]	1863.		1902.		1912.		1918.	
		Family.				Family.[2]	Standard Unit.						Family.[10]	Standard Unit.	Family.[11]	Standard Unit.	Family.[11]	Standard Unit.	Family.[11]	Standard Unit.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Beef or Mutton		10				10	2·6						4·55	1·2						
Bacon																				
Total Meat	2·25	10		6	1·2	10	2·6	1·3	1·75	1	2·8	1·8 (*a*)	4·55	1·2	7·15	1·9	6·53	1·7	4·3	1·1
Bread	7	43	8·6	7		43	11·3				10·5	10·56 (*b*)	55·75	14·7	38·83	10·2	39·61	10·4	39·78	10·5
Flour										1·4 gals.					1·25	0·3	1·56	0·4	2·43	0·6
Oatmeal and Rice				2 pts.									27	7·1	25·75	6·8	25·75	6·8	29·10	7·7
Potatoes																				
				lb.									1·5	0·4	1·2	0·3	1·08	0·3	0·45	0·1
Cheese	0·875	4 or		0·75	0·75	4 or	1·1 or				0·375		1·56	0·4	2·07	0·5	2·07	0·5	1·65	0·4
Butter, Lard, Margarine and Dripping		2		0·375	0·22	2	0·5													
Tea, Coffee or Cocoa													0·14		·61		0·66		0·55	
Sugar													2	0·5	4·31	1·1	4·57	1·2	2·89	0·8
													pts.	pts.	pts.	pts.	pts.	pts.	pts.	pts.
Milk: New	pts.	pts.				pts.	pts.						1·75	0·5	4·5 or	1·2 or	4·5 or	1·2 or	7·2	1·9
		24				18	4·7								8·75	2·3	8·75	2·3	3·9	1·0
,, Skimmed																				
Beer	14	24				24	6·3													

[1] *Account of Several Workhouses for Employing and Maintaining the Poor*, 1725.

[2] *Reasons for the Late Increase in the Poor Rates*, 1777. This is the dietary of a man, wife and four small children, showing the financial position of the family at the two periods.

[3] Brackenridge: "Concerning the Number of People in England." *Phil. Trans.*, Vol. 49, i. p. 268 ff. See also *The Present State of Great Britain and North America*, 1768, p. 34; *The Political Survey of Great Britain*, John Campbell, 1774, p. 71; *Insufficiency of the Causes to which the Increase of the Poor . . . ascribed*, Howlett, 1788, p. 64; *Observations on the Corn Bill*, John, Lord Sheffield, 1791, p. 18.

[4] *Museum Rusticum*, March 1765. Weekly allowance to every man in the Navy.

[5] *Reports of the Special Provision Committee appointed . . .* Norwich, Edward Rigby, 1788, p. 26.

[6] *A Political Enquiry into the Consequences of enclosing Waste Lands*, Society of Farmers, 1785. An estimate incidental to a statement of the supposed inhabitants of the country.

[7] *The Case of the Labourers in Husbandry*, David Davies, 1795, p. 8 ff. Flour reduced to consumption per standard unit: it has been calculated as an average of all the relative figures Davies gives. The consumption of meat is taken from an assertion that "Few poor families can afford themselves more than 1 lb. of meat weekly . . ." p. 19.

[8] *Some Account of the Shrewsbury House of Industry . . .* I. Wood, 4th ed., 1795, p. 102.

[9] *The State of the Poor*, Sir F. N. Eden, 1797. Wherever possible, *i.e. a* and *b*, the numbers have been reduced to standard men and the consumption averaged accordingly. *a* = av. of 36·2 standard men. *b* = av. of 33·4.

[10] Dr. E. Smith, Report on the Food of the Poorer Labouring Classes, etc., App. No. 6 to Sixth Report of the Medical Officer of the Privy Council, 1863 p. 262, cited by Fox, Agricultural Wages: *Journal Royal Statistical Society*, 1903, Vol. LXVI. p. 295. Without consideration of number in each family—370 families.

[11] Cmd. 76 (1919), Report of the Committee appointed . . . "to inquire into the Financial Results of the Occupation of Land."

almost stationary expenditure on bread."[1] The table which follows that remark shows that the proportion varies between 18 and 16·4 per cent., the lower figure applying to the higher income.

It thus becomes abundantly clear that if the farm labourer's income were of any sizable value greater now than heretofore, he would add to his dietary in the manner of the more highly paid urban workers.

G. E. FUSSELL.

[1] Cd. 2337, p. 6.

provisional nature of this or that statement as he makes it. But to the reader of it, that which was written as a careful inference easily acquires the value of an acknowledged fact. When anything turns on considerations of quantity or volume the lack of complete statistics is a serious matter; for inquiry from a modern point of view into ancient conditions is more instructive when attended by a sense of proportion. Here we have a difficulty that affects all historians who deal with ancient civilisation, and no writer, not even Professor Frank, can wholly escape it.

Eugenic theories, the outcome of Biology, have begun to claim a place in human history, even in economic history. The importance of race as a factor in efficiency is being recognised as not confined to politics and war. This movement starts from America, where the racial question has become a subject of no small uneasiness, even a cause of legislation. We need not wonder that the Professor treats this topic seriously in connection with Rome, recurring again and again to the failure of the old Roman stock. That the progressive mongrelising of the Roman people stood expressed in the servile and helpless masses of Roman citizens under the Empire can hardly be denied. That such an aggregate could neither rival nor restore the past is clear. But it had developed out of a sounder and more Roman past, and surely it stands to reason that some grave defects of that earlier age were to blame for a pitiful sequel. Now these grave defects are duly set out in the present treatise. I only suggest that they deserve more stress as direct causes of the later state of things.

That commerce played but a small part in early Rome, and was chiefly confined to the visits of foreign traders, is probably true. But the rise of Rome came about through her gradually gaining the hegemony of Latium. Does not this suggest that Rome had some advantage that her neighbours lacked? And may not this advantage have been her better opportunities for trade compared with those of the less accessible Latin towns? Was she, however devoted to agriculture, less solely agricultural than they? Here is a case in which some knowledge of proportions is desirable but unattainable, and we are left to guess. As the story proceeds and commerce grows, we see the tendency of seaborne trade to become a monopoly of non-Roman adventurers. After the ruin of Carthage the Hellenised East plays the leading part, with Syrians and Egyptians well to the front. All this is excellently handled by Professor Frank, and contrasted with the backwardness of Rome under the guidance of the

senatorial aristocracy. In connection with this he traces for us several momentous developments of the second century B.C., in which the destiny of the Republic revealed itself. Most important of these were the land question in Italy, the growth and treatment of new Provinces, the rise of a capitalist class bent on exploiting the resources opened up by acquisitions abroad. The problems arising from these were of infinite consequence for Rome, and admitted no simple solution.

From the economic point of view the situation may be briefly described as the struggle and triumph of individual interests as opposed to those of the State. Whether the Gracchi endeavoured to recover public land for allotment to the common people, or whether senators and knights fell to loggerheads over their several shares of Provincial plunder, mattered little in the long run. At all events the State treasury was never overflowing with surpluses due to the extortion practised by governors or tax-farmers. As for the agrarian schemes, they had hardly become operative before a process of nullification set in, the effect of which was to re-establish *latifundia* on a grand scale and in a more permanent form. Thus all profits tended to find their way into private purses. The penetration of Greek influences and the unsettlement of old Roman ideas and habits had much to do with the "race to wealth" that marked the last century of the Republic. To the capitalist knights, organised in companies, selfish greed was the law of their being. Their growing political power menaced the senatorial nobility; to meet it, and so to retain their own hold on offices and the chances of emolument, the only practical resource of the nobles was to corrupt the Assemblies. The unscrupulous waste of money to achieve temporary partisan ends left little margin for outlay on works of permanent public utility or ornament. Hence Augustus found it needful to recall by precept and example the patriotic duty of Romans to improve and embellish Rome. But no emperor, not even Vespasian, was ever able to place the Empire in a position of lasting financial strength.

The old-fashioned simple honesty, of which Polybius in the second century B.C. still found a residue to admire, was gone for ever. Yet the need of securing revenues for the State, by such methods as would give the highest net returns, was urgent. Little or nothing was effected in this direction until the coming of an Emperor furnished a central authority able and willing to check the malpractices of subordinates. The improvement begun under Augustus, combined with the return of peace, no doubt

tended to promote the commercial activity observable under the early Empire. But it seems to me that the novel firmness of central control, beneficent in its immediate results, was the beginning of a process destined to be in the long run disastrous. The extension of the municipal system in the Provinces gave the imperial fabric more and more the character of a huge aggregate of local units, severally enjoying self-government, but with no influence on imperial policy, collectively and individually subject to the central power in Rome. That power could view their local rivalries and jealousies calmly, so long as they kept the peace; for it was not intended that they should combine for common action. I believe that this isolative system, unduly concentrating the attention of municipal burgesses on their own direct local interests, contained from the first the germ of grave evils, causes of the impotent misery in which we find them later on. That these evils, superficially political, were at bottom largely economic, seems to me highly probable. On these points I should welcome the considered opinion of Professor Frank, all the more as he does not at present seem to regard the municipal system as a matter of importance in his inquiry, and the item " municipalities " does not even occur in the index. To the conditions of agriculture he gives great attention, and his treatment is most instructive, correcting as he does various mistaken notions in the course of his argument. The passage (pp. 353–6) on the confiscations and allotments of 42 B.C. is an instance. But it deals with Italy alone and Italian municipalities.

Now under the Empire the expansion of land exploitation abroad was far more important than that in Italy. I hope I am not unduly undervaluing the " colonies " founded by Marius in Africa, but the two movements of chief importance seem to me the formation of great landed estates by individuals, and the growth of *municipia*, each of which had its *territorium*. These phenomena were beginning to appear in the last age of the Republic; under the early Empire their expansion was rapid. An emperor might confiscate the estates of individuals, but this only added to the Imperial Domains. The territories of the local Boroughs were not affected thereby. These must have comprised in the aggregate a vast area, and their management, good or bad, must have had a momentous effect on the general economic situation in the Empire. Here is a subject generally ignored by historians, awaiting the consideration of so highly qualified an inquirer as Professor Frank. He like others bestows full and illuminative attention on the inscriptions that have

recently thrown much light on the African Domains. For this I am grateful, even when hesitating to follow him in every detail. But I look for a more emphatic recognition that this matter of Imperial Domains is only a part, perhaps not the larger part, of the land question of the Empire. In connection with this topic I must refer to the passage (pp. 496–500) in which he deals with the still vexed problem of the development of the later serf-colonate.

"The change of status in the case of the *coloni*," he says plainly, "was revolutionary," and he argues that it must have been brought about by some "drastic measure" resorted to by some emperor in some great emergency, a "governmental crisis," as he puts it. For the recognition of *coloni*, by Constantine's decree of A.D. 332, as bound to the soil only assumes the existence of this condition of serfdom, and does not create it. Therefore the really operative decree must have been of an earlier date. As we have not got it, we can only conclude that it has been lost. Now all this depends on the assumption that a change cannot be "revolutionary" unless it is expressed in some "drastic" action concentrating its operation on an ascertainable point of time. To me it seems far more probable that a slow and silent revolution, in this as in many other cases, worked itself out by gradual changes of circumstance. Piecemeal changes to the disadvantage of *coloni* brought them down into such a state of helplessness that it only remained to recognise *de jure* what existed *de facto* already. Therefore I dissent from the Professor's conclusions and believe the assumption of a lost imperial decree to be unnecessary.

In the Preface to this new edition the author pays a well-deserved compliment to the great work of Professor Rostoftzeff, which he accepts as rendering needless his own contemplated volume on the Imperial period. It is possible to doubt this generous conclusion. At all events we may be glad that in more than one place he dissents from the views of Rostoftzeff as too venturesome, and gives his reasons. But on one point, that of Roman (Italian) emigration, where there is no disagreement, I think Rostoftzeff conveys to readers a clearer impression. That the emigration was not an outflow of free labourers seems to me a fact on which too much stress can hardly be laid. That the urban growth of industries was connected with the employment of slave hands is not, I think, seriously denied. Nor is it questioned that the exploitation of the Provinces by financial speculators, including the acquisition of real estate, was the leading motive of emigration. But our notions of the actual condition

of the farm population (and these were the majority) in the great Provincial areas must be coloured by what we believe to have been the normal supply of labour. My belief is that the "Roman" settler, particularly the discharged veteran, as a rule either employed slave labour or that of local natives. He might lend a hand himself at need, but in the main he was a director. On the large estates the supply of native labour was probably the first condition of successful management. Now it seems to me that the picture of rustic relations drawn by Rostoftzeff expresses the actual features of the situation more clearly than has hitherto been done by others. But, while I accept his view of the facts, I do not feel bound to follow all his inferences, and I think the matter is one on which there is room for some further treatment by Professor Frank.

I venture to pick out a few details that are to me of particular interest. For instance, Rome as a market centre at the Tiber crossing (pp. 23, 32). Land and the population question (pp. 55–63). The investment of capital in land (pp. 126, 276, 278, 320, 356). The importance of Massalia and economic causes in connection with the second Punic war (pp. 95–6), and the rather more speculative criticism of the reconstruction policy after the war. As to rotation of crops (pp. 105, 107, 429), it seems to me that the evidence proves a knowledge of the fertilising effect of some crops and the injurious effect of others, and that this knowledge was turned to account in the choice of certain particular sequences. But when we speak of rotation I think we mean a regular system of (say) three or four courses as the normal procedure of farm management; and of this I do not find proof as an ancient practice. Speaking of the tenant *coloni* of the early imperial period (pp. 431–3), Professor Frank courteously but firmly rejects some views of mine (*Agricola*, p. 256), and it is not for me to judge in my own case: I would only ask him to consider the words of the younger Pliny (Epist. iii. 19, § 7), a passage often misconstrued by even able writers. When he regards the ruling class at Pompeii as the descendants of the veterans planted there by Sulla, I feel attracted by the ingenious suggestion. The uneven balance of trade, owing to the shortage of return cargoes, which placed Italy at a disadvantage in the Eastern trade (p. 309), is well brought out, as one expected. As to the practical effect of the colonising schemes of Cæsar and the Triumvirs (p. 331), I submit that the estimate given is rather too favourable. The veterans at least were not always good material for colonisation (see p. 438), and after the time of Marcus it is

remarked (p. 454) that they were more and more of mixed stock.

In a book of such wide scope and full of detail it is not possible to comment on everything within the limits of a review article. If I have asked for more on certain points, and have doubts as to some conclusions, I welcome none the less heartily the timely appearance of this new edition of a most instructive and stimulating work.

W. E. HEITLAND

GOVERNMENT AID TO INDUSTRY IN THE FRENCH ECONOMIC REFORMS OF 1860

The *coup d'état* accomplished by the Anglo-French Treaty of Commerce in January 1860 seemed to the French people to be the whim of a despotic sovereign put into effect suddenly by decree without adequate preparation. But new facts gleaned from the French archives confirm the view that the apparently sudden act of Napoleon III was done on the advice of one of the ablest economists in France after years of study and observation. This plan of Michel Chevalier,[1] which was the basis of both the well-known letter of the Emperor to his Minister of State, Fould, published January 15, 1860, and of the treaty with England signed eight days later, was drawn up in August 1859, but was neither dated nor signed, and no formal acknowledgment of it was ever made by Napoleon III. We know from his correspondence with Cobden that Chevalier advised the ntiegoation of a commercial treaty with England in 1856, and that a carefully conceived plan for economic reforms in France was made by him as early as 1852 and published in his *Système Protecteur*.

Among the most interesting of the ideas in Chevalier's plan of August 1859 was the recommendation of a large loan to the manufacturers of France, to be taken from the unexpended balance of the loan of 500,000,000 francs floated in May of that year to meet the needs of the war with Austria. This idea, when it was made public in the Emperor's letter to Fould, was severely criticised by French economists, not only by the small group of orthodox free traders who followed the Manchester School in their opposition to all treaties of commerce, but even by the partisans of such treaties. Chevalier's advocacy of the loan is thus one of the important links in the chain of evidence which proves him to be the author of the anonymous plan of 1859, because no other French economist of that period would have recommended such a loan; the general attitude being that French industry had suffered for years from regulation and protection by the Government, and that what it needed was to stand on its own feet. Chevalier approved of the regulation of industry

[1] For the evidence as to the authorship of the plan see the writer's "Chevalier's Plan of 1859," *American Historical Review*, October 1924.

by the Government, although he was the leader of the Free Trade School in France. He felt that the economic life of the nation needed not less, but more control, for he was the disciple of that social reformer who wanted to reorganise the State on the basis of industry and trade—Henri de Saint Simon.

What reasons did Chevalier give for recommending a large loan to manufacturers in 1860? His plan of 1859 gives us a fairly satisfactory answer, for in it he puts such a loan, together with free raw materials and the establishment of training schools for skilled workmen, among the ways of securing the general acceptance of the Treaty of Commerce with England and the drastic reduction of the French tariff which that treaty would involve. Even if the loan did not induce manufacturers to accept cheerfully the prospect of British competition, it would give the Government some justification for saying that it had done what it could to enable them to meet that competition. This was certainly the reason why the Emperor accepted the idea of the loan so readily. He sanctioned the economic reforms of 1860 because he hoped the treaty would promote more cordial relations with England, and because he felt they would cheapen for the poor the price of food, clothing and other necessities of life; but in promoting these desirable objects he did not wish to arouse the open hostility of the industrial leaders of France. Perhaps an offer of money, together with a duty of 30 per cent. on iron, the assurance of free raw materials, and the promise of a formal investigation by the Government of the condition of French industry would suffice to placate the manufacturers; if not, these measures would surely deprive them of the support of public opinion which they had secured so successfully in 1856, and on other occasions when they had prevented the reduction of the tariff.

Chevalier saw clearly the political advantages of having the Government lend money to the manufacturers. He felt that there were also economic reasons for taking this step. French manufacturers must be forced by foreign competition to improve their methods and lower their prices, but the changes to be made would be difficult and costly. Much had to be done, and the time allowed the manufacturers was short. It was true that they had only themselves to blame for this, for it was their obstructive policy and blind opposition to all reform that had forced the Government to negotiate secretly the treaty of commerce with England and confront the French public with a *fait accompli*. But if the manufacturers were pressed too hard, industrial

depression might follow and undo the work of reform. French manufacturers had enjoyed almost complete protection against foreign competition since the beginning of the revolutionary wars in 1792. As a result they had had full control of the home market, and monopoly has never promoted progress in industry. Among the more startling examples of industrial backwardness in France in 1860 that could be cited are the prevalence of hand weaving and of smelting iron with wood. The manufacturers must, then, enlarge their plants and install machinery, or improve the old machinery they had, and they must do this within a year. There seems to be reason, therefore, for saying that Government aid to industry could be justified on economic grounds.

Action on the proposed loan to manufacturers was taken promptly. The draft of a bill to give the necessary legislative sanction was approved by the Council of State on March 5, 1860, and Chevalier's last act as a member of that body, before his promotion to the Senate in recognition of his share in negotiating the treaty with England, was the preparation of the report recommending the bill to the Corps Législatif. Chevalier states in this report that the object of the proposed loan was to facilitate the renewal of industrial equipment. He admits the general principle that public funds should be used for public purposes, not private, but claims that exceptions should be made temporarily in certain cases under unusual circumstances. It has been admitted several times, he says, that the State can give bounties to encourage industry. The French Government was then paying 4,000,000 francs a year in bounties to encourage deep-sea fishing. Although this might be justified on the special ground that the industry helped to train sailors for the navy, there are other cases where the interests aided by the use of State funds are essentially private in character. After the Revolution of 1848 bounties were given for the exportation of certain goods solely to relieve the congestion of private warehouses. At the same time the Government advanced funds to organise workmen's associations. After the Revolution of 1830 the sum of 30,000,000 francs was lent to commerce and industry.[1] A precedent of even greater importance is to be found in British legislation, when Sir Robert Peel, in 1846, had Parliament lend to British agriculture the sum of £3,000,000, which was subsequently doubled, to enable landowners to make the adjustments forced by the repeal of the Corn Laws. There is no country, says Chevalier, where it is more the rule to

[1] *Moniteur*, October 19, 1830. Louis Philippe signed the decree, October 17, which promulgated the law voted by the Chambers.

leave industry to its own devices without help from the Government, yet experience amply justified the exception made in this case.[1]

"Now that we are considering in France the reform of our economic system in the general interest, and that a decisive step in that direction has been taken by means of a treaty of commerce with the leading industrial Power in the world, the Government of the Emperor, with its habitual solicitude for industry, has sought the means by which it can make the transition easy and without shock or suffering. For this reason, in addition to adopting permanent measures for diminishing the cost of raw materials and of transportation, and also of developing consumption on a larger scale, the Government has thought it wise, as a temporary and wholly exceptional measure, to allot the sum of 40,000,000 francs for loans to industries for the renewal and improvement of their equipment.[2]

"It is true that the national industries have not remained stationary in the midst of the general progress that has been made throughout Europe. They have greatly improved their products and have perfected their equipment so as to manufacture cheaply, as they should in the public interest. It must be said, however, that, despite frequent warnings by the Government, the renewal of machinery and equipment has not generally been made as rapidly as could have been desired, and there is reason to believe that serious efforts should still be made in some of our coal mines and forges, and in other industries.

"Among the leaders of industry who have been held back to their own injury, no less than to the injury of the consuming public, there is not one to-day who is not eager to place himself in a situation that will enable him to encounter foreign competition safely. The Government, also, is mitigating the effect of such competition by duties that may run up to 30 per cent. But among these leaders are some who, while perfectly trustworthy, might have difficulty in securing in the time provided, in the ordinary market, the sums they need to renew and improve their equipment. They would find this particularly difficult if they had to ask to repay the principal in annual instalments spread over a considerable period."

[1] Br. Statutes at Large: 9 & 10 Vic. cap CI, Act August 28, 1846. The statute authorises loans for drainage in England up to £2,000,000 and in Ireland up to £1,000,000. No particular reason is given for the enactment of the statute at that time, and a number of the earlier statutes granting similar loans are cited.

[2] The records of the Commission on Loans to Industry established by the Act of August 1, 1860, are in the Archives Nationales, Série F 12, Nos. 4640–4645 inclusive. Chevalier's report to the Corps Législatif, the correspondence between the Ministers of Commerce and Finance, where not covering a loan to an individual firm, and the first report of the Commission to the Emperor, April 25, 1861, are in No. 4640. The papers regarding individual loans are in the other folios, classified alphabetically according to the names of the manufacturers without regard to industries.

Chevalier goes on to assure the Corps Législatif that the proposed loan is not likely to bring loss to the Government. His optimism was probably justified, although the records available at present do not enable us to say exactly how many of the loans to individuals were completely repaid. The distinguished reporter seems to have failed, however, to foresee the eagerness with which the manufacturers would seek to fish in the well-stocked pond of the Government. He assures the Corps Législatif that the number of manufacturers who will be unable to secure the necessary funds from private sources will be small. This was probably the case, but the records show that many even of the great captains of industry thought it would be cheaper and easier to get the money they wanted from the Government than to make the effort to raise it themselves; and that the real object for which they wished to use the money was the increase of their ordinary capital, or the enlargement of their dividends or profits. If they could get funds for these purposes on easy terms from the Imperial treasury, why should they take the trouble to enlarge their mills or buy new and costly machinery? Great care had to be taken by the officials who passed on applications for loans to ensure the use of the money for the purpose intended by the Government. The only positive recommendation of Chevalier on this point was that the rate of interest charged by the Government should be not less than 5 per cent., the usual rate for commercial loans being 6 per cent.; and that annual reports regarding the loans granted should be made to the Emperor and the Corps Législatif. In concluding he said that he did not propose to lay down in advance in this report the conditions under which individuals might receive allotments of the proposed loan. He believed that the influence exercised by the loan would be chiefly moral; that it would show the small manufacturers that the Government was as keenly interested in them as in the big manufacturers. It would show the working classes that the Government had at heart their welfare, which it would promote through the effective support given to the leaders of industry who made a transformation of their plants and manufacturing methods that could be postponed no longer, and by which alone the country could receive the benefit of cheap production, so favourable to the interests of all and to the increase of the power of France.

The law authorising a loan to industry of 40,000,000 francs was promulgated by the Emperor, August 1, 1860. The text of the statute itself is of little interest. It merely authorises the loan and fixes the rate of interest at 5 per cent. The Government

is left free to issue its own regulations regarding the conditions under which it will lend money to the individual manufacturers. These regulations were published in the imperial decree of October 24, 1860, which announced that a Commission would be appointed to examine the applications for loans; that it would have power to decide the order in which these applications would be considered, and to determine the amount to be granted in each case, and the nature of the guarantee the borrower must furnish. The decisions of the Commission were to be approved in every case by the Ministers of Commerce and Finance. Finally, on December 5, 1860, a [1] second decree announced the names of the commissioners. M. Boinvilliers, head of one of the sections of the Council of State, was appointed president; M. Julien, Director of Internal Commerce, secretary; and three Maîtres de Requêtes attached to the Council of State (MM. Bosredon, Marbeau and Aucoc) were designated to write the reports on the individual applications for loans. The other members of the Commission were M. Germiny, Governor of the Bank of France; de Boureuil and Lavernay of the Council of State; Guillemot, Director-General of the Caisse des Dépôts; Denière, President of the Tribunal of the Seine; and Chouré, Directeur du Contentieux in the Ministry of Finance. It was, in short, what we should call a commission of financial and legal Government experts.

At its first meeting on December 24, 1860, the Commission on Loans to Industry voted to receive applications for loans up to January 20, 1861, but it appears from the correspondence between the Ministers of Commerce and Finance that this limitation was not observed, for the latter (then Achille Fould, who, in 1860, was Minister of State) wrote his colleague in February 1864, that he felt the manufacturers should be notified that no applications for loans would be received after July 1 of that year. The printed forms sent out by the Commission to the applicants show that the loans were to be made in three instalments, to be paid out (1) on the official signing of the contract by the applicant and the representative of the Minister of Finance; (2) when the use made by the recipient of the first instalment has been approved by the Government; and (3) when the same has been done for the second instalment. The loans were to be repaid with interest during the twelve years following the signature of the contract. During the first two years only interest was to be paid; then for ten years the principal was to be repaid in equal annual instal-

[1] The three decrees of August 1, October 24 and December 5, 1860, are all published in the *Bulletin des Lois*.

ments together with interest on the balance still unpaid. The law left the Government free to ask such guarantees of repayment from applicants as it deemed proper, and in most cases a first mortgage on the factory or manufacturing equipment of the applicant for the full amount of the loan was requested, and if this could not be furnished, the loan was refused; but in a few cases where the applications were from manufacturers with a national reputation no such guarantee was demanded.

At the same meeting the Commission appointed a committee of the three reporters, the Director of Internal Commerce, and the President of the Commission, to obtain information regarding the applicants for loans. They were to make the necessary inquiries through the prefects, the chambers of commerce, the engineer of the department in which the applicant had his factory and the Bank of France and its branches. The prefects, who evidently furnished a great part of the information desired, were instructed to treat it as strictly confidential; but they could ask for the assistance of the local director of registration, who would attend to financial details.

The Commission submitted its first report to the Emperor April 25, 1861. This stated that over 500 applications for loans had been received, and that the total amount asked for was 80,000,000 francs, or twice the sum authorised by the law of August 1, 1860. The Commission rejected 272 applications, approved 200, and at the time of reporting was still considering the remainder. The loans granted were distributed among the following industries: Metallurgy, 27 loans for a total of 9,100,000 francs; Textiles, 88 loans for 15,060,000; Transportation, 5 loans for 1,200,000; Mines, 11 loans for 3,800,000; Machinery, 18 loans for 1,417,000; Sugar, 6 loans for 3,250,000 francs; and Paper and other industries, 45 loans for 4,583,000. The total amount thus granted in loans was reported as 38,410,000 francs. This amount varied somewhat in the following years as loans were cancelled or applications for loans withdrawn and new loans granted, but it was always kept within the legal limit of 40,000,000 francs.

The records of the Commission show that great solicitude was felt for coal mining and iron manufacturing firms, probably because of the fundamental importance of these two industries and the dependence of other industries upon them. In many cases the loans to such firms were very large and there are examples of loans to firms whose difficulties were chiefly the result of unwise financial operations. In the case of the Compagnie des Houillères

de Béthune, in the Pas de Calais basin, the reporter writes that the company really sought a loan in order to pay more cheaply for improvements that it had been able to finance from its own funds, and the Commission reduced the loan to be granted from the 1,200,000 francs asked to 200,000 francs. But when the Thivencelles coal company, which was suffering from financial troubles in former years, asked for 1,000,000 francs they received the full amount, although the reporter wrote that they were in no danger from foreign competition. An even more serious example is that of the Decazeville iron company, run by the Duc Decazes, the heir of the well-known minister of Louis XVIII. In 1861 the firm received the full 1,600,000 francs it asked, of which 900,000 francs was to be spent in taking the top off a mountain so that coal could be mined in the open air; 200,000 francs was to be used for new coke ovens; 120,000 francs for a workshop for naval construction; and 200,000 francs to build an aqueduct to bring pure water. The company said that in the past they had mined coal for their own use exclusively, but that now, thanks to the new railroad being built to Bordeaux by way of Perigueux, they could develop the selling of coal and drive the English from the Bordeaux market. These grandiose plans would seem to have deserved investigation, but the reporter stated merely that the credit of the firm was excellent and that its reputation was world-wide. In the spring of 1865 the Duc Decazes applied to Béhic, the Minister of Commerce and an important iron manufacturer of Marseilles, to give his firm an extension of time for the repayment of the loan granted in 1861. Béhic was anxious to help him, but before anything could be done the Decazeville company was declared bankrupt by the courts. The duke ascribed his troubles to insufficient circulating capital, of which practically all manufacturers of that period complained, and to the steadily falling price of iron; but the indications are that the real cause of the failure of the firm was the excessive issue of securities.

Other loans to metallurgical firms were made more wisely. James Jackson & Company of St. Seurin sur l'Îsle, Gironde, received 1,200,000 francs instead of the 2,000,000 francs asked for the repair of several blast furnaces and the purchase of various machines for the production of steel on a large scale. The reporter to the Commission wrote that it was important to encourage the production of Bessemer steel, as the future of the whole iron industry using wood as fuel depended on it; while the manufacture of rails, ships, cannon and agricultural machinery

soon would depend on it. The wisdom of attempting to retard by Government action the substitution of coal for wood in the smelting of iron may be doubted; but the encouragement of the Jackson firm was wise, for its directors were among the leaders of that period in the increase of production and the improvement of methods. Another firm that deserved encouragement was the Langlois company of Nantes, described as an important furnisher of the navy and the merchant marine, which received the full amount asked of 400,000 francs in March 1861. They stated in their application that English competition had forced down the price of iron, and that they proposed to meet it by increasing their production 40 per cent., which would decrease the cost by about 2 francs per ton. To do this they needed a railroad in their yards, one new puddling and one reheating oven, a saw to cut iron, a steam engine of 20 horse-power for puddling, a steam boiler of 25 horse-power, a steam hammer of 2 tons, and equipment for rivets and armour-plating of ships.

Of the 18 loans granted to constructors of machinery totalling 1,417,000 francs, that given Mercier of Louviers in Normandy is, as the reporter said, of unusual interest. We know from the posthumous book of Charles Ballot on the Introduction of Machinery into France, and from other sources, that Mercier was one of the great leaders of the Industrial Revolution in France, a man of real vision and remarkable energy. Mercier had printed at the time of making his application, March 14, 1861, the following letter, which was evidently sent to all the members of the Commission on loans. After speaking of the services he could render French manufacturers in supplying them with better equipment, which was the main object of the law of August 1, 1860, he said:

"In the last ten years I have sold machines worth 8,000,000 francs with the defective equipment of my shops, although with high protection, far higher than that which machines will have under the Treaty. When my shops are reorganised to meet the new needs I shall be able to produce machines to the value of 2,400,000 francs a year which would otherwise be imported. Even then my shops will be inferior in organisation and equipment to English workshops, which are able to specialise as I cannot, and which have all the industrial centres of the world as markets. In view of this competition I must lower my prices 20 per cent. compared to last year. To do this and still get a legitimate profit of 10 per cent. my enlarged shops must have all the economical methods and machine tools used in England. I plan to spend 550,000 francs of the loan" (he asked for 700,000 francs and received 600,000) "on this and to use the rest to meet the increase

in the volume of trade and to increase my circulating capital. The latter is necessary, as I have always had to give customers long credit. This the English will not do. They deliver for cash down and often ask payment in advance. Only through these credits have many manufacturers been able to complete their equipment.

"In the last six years I have spent over 150,000 francs to make looms running up to seven shuttles, as so to make even the most varied novelties. I have also worked on the replacement of the mule jenny by the water frame, which makes finer yarn and takes less room; and, finally, on machines for making felt recently invented by Vouillan, who received a medal at the Exposition of Rouen. My shops as now equipped could not properly develop these new discoveries, and would force me to maintain high prices on the machines I alone sell. As guarantee I offer my shops, which will be worth 1,000,000 francs when enlarged and producing on an increased basis, and in the presence of the new foreign competition, which will be further increased by the application of the new treaties planned with Belgium and Germany."

We have seen that the Commission granted 88 loans to textile manufacturers for the sum of 15,060,000 francs, according to the first report submitted in April 1861. Most of this went to the cotton industry, which was the one most deserving of help because of the colossal development of the rival industry in England. But before considering any of the loans to manufacturers of cotton we may stop to notice a few of the small number of loans to manufacturers of woollens and silks. The case of Granier, a maker of blankets at Montpellier, is curious and might deserve serious criticism if the sum loaned had been large. He ingeniously claimed that the treaty with England had injured him through causing the abolition of the bounty paid for exports; that the abolition of the duty on raw wool was no compensation because the price of wool had risen. Granier therefore asked for 83,000 francs to enable him to renew his equipment and fight England in the markets of North and South America; and he received 40,000 francs. The price of wool did rise temporarily because of the rapidly increasing demand for woollens in view of the expected shortage of cotton owing to the crisis in America, but it was soon brought down by a flood of imports from South America and Australia. Another loan for 200,000 francs granted Hurstel, in the Department of Aisne, is interesting because the reporter describes it as coming within the spirit if not the letter of the law, in that it would promote a decrease in prices, and thus permit a fight against foreign competition. Hurstel was a comber of wool, but he asked for help

in order to add spinning and weaving mills to his plant for combing by machinery. He wrote that foreign and home competition forced him to do this because his rivals, the spinners and weavers, had taken to combing in order to save the profits paid to middlemen like himself. In short, the boom on woollens caused by the cotton crisis was forcing the integration of the industry.

In the silk industry there is only one loan that should be noted. The Vignat firm of St. Etienne, printers and weavers of plain ribbons, asked for a loan of 1,200,000 francs in July 1861, and finally received 500,000 francs in January 1862. The case was difficult to decide, for the Vignats had been obliged to suspend payments on the death of their father, the former head of the firm, shortly before they applied for the loan. They were, therefore, practically bankrupt. The money obtained from the Government would be used to satisfy creditors, and not for the purchase of new equipment. On the other hand, the Vignat application was endorsed by the Mayor of St. Etienne, the Prefect of the Department of Loire, and the Minister of the Interior, de Persigny, a personal friend of the Emperor. The Vignats had a valuable plant, employed many workers, and had rendered great services to the silk industry. They had been the first to break away from the prevailing organisation of the mills in the district about St. Etienne, where the yarn was handed out to the girls of the country-side, who wove the ribbons in their own houses. The Vignats had built a large mill in which they had set up over 100 power looms. They had taken this step in order to meet Swiss competition, and the crisis which had depressed the silk industry since 1857 because of the change in fashions followed by the virtual loss of the American market. The initiative taken by the Vignats had been somewhat timidly followed by others, but power weaving in mills had not yet been firmly established at St. Etienne. The Prefect wrote that if the Vignats were allowed definitely to fail, all progress in the silk industry of that district would cease. This appears to have been the reason which induced the Commission to overcome its natural scruples and grant the loan. It shows that in a deserving case the letter of the law could be broken in order to abide by its spirit.

A study of the loans granted to manufacturers of cotton is difficult because of the crisis brought on by the American Civil War and the attendant cotton famine. Virtually every mill-owner who received a loan asked within two or three years, or even less, either to have it increased or else to be granted exemption from repayment in whole or in part. In practically every case

the cotton manufacturer had either to change his machinery in order to make woollen or linen cloth or yarn, or else he had to adapt it to the use of Indian cotton instead of American, which was difficult because Indian cotton had a shorter staple, was full of impurities, and gave yarn whose threads broke more easily. Yet despite the complications caused by the American crisis, we can learn something regarding the use made of the loans granted to cotton manufacturers. A few examples will show what happened in most cases.

Baril of Amiens, a manufacturer of Utrecht velvet for furniture, asked for a loan of 150,000 francs in March 1860, renewed his request in August, and received 100,000 francs in March 1861, when the first payments were authorised by the Commission. Baril was the first manufacturer in France to weave Utrecht velvet on mechanical looms. As the market for his product was not sufficient he made also ordinary velvet, the manufacture of which was an important industry at Amiens. The reporter informed the Commission that Baril was an able manufacturer and safe from competition as regarded his own speciality, but that in cotton velvet he would encounter difficulties, as the whole industry was likely to have a hard fight against English competition. In March 1862 Baril had satisfied the Commission that he had made good use of the first two instalments of his loan and in April he received the third instalment. Meantime, in August 1861, he had asked that his loan be increased to the original amount asked for of 150,000 francs, on the ground that the low prices of his English competitors were possible only through large-scale production, and that he could not produce on a larger scale without more funds. This request was refused by the Government in April 1862. Then Baril began to feel the effects of the American cotton famine. In December 1862 he asked for a new loan to enable him to change his looms and buy preparatory machines for the weaving of linen. His application was endorsed by the Prefect of the Somme, who wrote that the other manufacturers of cotton velvet were making the same change and that they all deserved all the assistance the Government could give. Baril's application was rejected in January 1863, on the ground that there were no funds available, and a second request made in July was refused in August for the same reason. Finally, in June 1865, Baril put his case in the hands of the Chamber of Commerce of Amiens and asked for the cancellation of half his debt to the Government. The Chamber wrote earnestly to the Minister of Commerce endorsing Baril's request, and stating that

the existence of the whole industry of Utrecht velvet was at stake. The Minister of Commerce sent the papers to the Minister of Finance in August with a favourable recommendation, but the records of the Commission do not show what action was taken.

Baril's letter to the Chamber of Commerce is of great interest, because it shows us what his difficulties were and what use he made of the loan. He writes that he organised his company in February 1857, with a capital of 300,000 francs, to buy and exploit Anglo-French patents for the mechanical weaving of Utrecht velvet. In May of that year he signed an agreement with J. Crossley & Son of Halifax regarding the patents, and in March 1858 the French Government granted permission to import the desired machines from England. The looms came in June, but the preparatory machines had practically to be invented because the usual ones were not suited to the manufacture of Utrecht velvet. Another difficulty was the finding of a French constructor of machines who could make looms from the English models. This was finally solved in December 1858, when 14 looms were set up in Baril's mill, but an English foreman and workmen had to be brought over to show how they should be run. At first the cloth produced was inferior to that made by hand, and the general costs were too high; then the price of mohair yarn rose 30 per cent., until Baril found that his cost of production exceeded that of hand-made velvet. After long investigation of possible improvements it was discovered that one of the chief causes of the inferior quality of the cloth was the inferior wooden rings for the looms brought from England. After many failures Baril finally succeeded in making perfect rings at Amiens, and, finding that his mechanical looms could now meet the competition of hand-made velvet, he secured French patents in June and July 1860.

At the beginning of 1860 Baril had 58 looms running; 38 making Utrecht velvet and 20 cotton velvet. As his general costs were too high, he secured the promise of funds with which to buy 100 more looms for cotton velvet. Then came the announcement of the abolition of prohibitions (that is, of the treaty of commerce with England), which frightened the capitalists.

"I was sure their fears were exaggerated," wrote Baril; "I was well informed regarding the English market, and certain that Amiens could compete. I therefore asked for a loan of 150,000 francs in August 1860, and received 100,000 in March 1861 and January and April 1862. I used this to erect a new building and to buy and set up 108 looms for cotton-velvet, and

I already had 82 of these when the crisis of the American War came. The result was the quick rise of cotton with which the cloth could not keep up, loss on the goods, stagnation of trade, lack of credit, and the closing of one of the chief markets for Utrecht velvet.

"I had to stop the manufacture of both forms of velvet," continued Baril. "I studied linen and got orders from Amiens merchants and an agreement from the Pont Remy mill to supply yarn. But my funds were sufficient to change only 30 looms, and this was not enough to pay. Then the medal awarded me at the Exposition of London (1862) attracted the attention of French manufacturers to the mechanical weaving of Utrecht velvet. Payen, and later others, gave me enough orders to resume work with my 38 looms. I had great difficulty in training workmen in mechanical weaving, and these difficulties kept cropping up, and still do. Meantime wages and excessive general costs due to an insufficient number of looms, interest on capital, the cost of all these investigations, the change of looms—all these meant continued loss. My net loss is now 331,429 francs. My average annual sales since 1858 have been 280,000 francs. With my equipment I should sell for 1,000,000 francs. My present plight is due wholly to insufficient production."

The cases of other cotton manufacturers who received loans show that the money was used, as in the case of Baril, to purchase better equipment and thus to increase production and decrease costs. One spinner in the Department of Somme wrote that with his loan of 300,000 francs he was able to buy and set up new machines and to spin yarn of better quality than the English and that he could have sold it at the same price under normal conditions. A weaver of muslin in the Department of Rhone, who received a loan of 300,000 francs in March 1861, wrote that he had used hand looms scattered widely through the country, but that the prospect of English competition had brought down wages 30 per cent. and the price of goods 25 per cent., which would force him to build a mill and set up power looms. A third case is that of a spinner named Leyherr at Laval, in southern Normandy, who asked for a loan of 600,000 francs and received 400,000 in March 1861. He wrote that he had run his mill seven years and had renewed his equipment once; but that the reform of the French tariff would now force him to renew it again. He had 12,000 mule spindles and 3,000 spindles for twisting yarn, and he also printed and dyed cloth. He wished to replace his spindles by an equal number of self-actings and by the latest model of spindles for twisting yarn, which with the necessary accessories would cost 550,000 francs. In addition Leyherr planned to erect a mill for power weaving at a cost of 200,000 francs to replace

the hand weaving which was universal in southern Normandy. The Commission replied that his resources were not sufficient to justify so ambitious a programme and that he must revise his plans if he wished a loan. As a result Leyherr renewed only his ordinary spindles, half water frames and half automatics. He estimated that this would increase his production by 600 kilograms of yarn a day and decrease his costs 20 per cent. These improvements had cost him 650,000 francs.

Finally, we may note the case of the Wibaux-Forin firm, makers of the famous mixed goods of Roubaix near the frontier of Belgium, This was a firm in the forefront of industrial progress, with a reputation of which it was exceedingly proud. The owners actually wrote the Government that they would not accept a loan unless their personal note was regarded as sufficient guarantee of repayment, and the Commission agreed to grant a loan of 500,000 francs on this condition in March 1861 ! The firm had been organised in 1811 and claimed to be the first in Roubaix to make mixed goods. They had built a spinning mill in 1821, and in 1846 had replaced its machines by 400 self-actings of 500 spindles each. In 1844 they had set up the first mechanical loom in Roubaix for weaving fancy cloth. In 1860 they had ordered 33,000 new spindles, and they planned to use the loan to complete this equipment. They wrote that they had two steam engines of 200 horse-power with which they could run 51,000 self-acting spindles. The correspondence with the Government shows that the Wibaux firm spent the whole of their loan before the end of the year 1861.

The records of the Commission on Loans are so incomplete that it is almost impossible to draw general conclusions regarding its operations and the results they produced. We have available only the first report of the Commission to the Emperor in April 1861. None of the correspondence covering grants to individual applicants goes beyond the year 1865, when repayments of capital had barely begun. We can say nothing, therefore, regarding the repayment of the loans. A few conclusions only are justified by the existing records. It seems evident that the total sum authorised by the Act of August 1, 1860, was never exceeded, and it seems probable that no loans were granted after the spring of 1865. Careful investigation of the needs and the financial resources of applicants seems to have been made in most cases, and it can be said that, in general, the Commission performed its designated functions with proper care and impartiality. The few cases that suggest susceptibility to political

influence or lack of proper investigation are balanced by other cases where investigation seems to have been pushed too far with unnecessary delays and hardship to needy manufacturers. As regards the results of the loans, the total sum authorised was too small to have any noticeable effect on the general industrial situation. The liberal tariff policy of France after 1860 and the American Civil War were so significant that they completely overshadowed all other influences. But there can be no question that the loans were of great service to a considerable number of manufacturers, and that they probably saved several of them from failure. It seems probable, also, that the loans helped to soften the opposition of the manufacturers to the new commercial policy inaugurated by the treaty with England. There seems to be ground for saying that the main objects of the Imperial Government in authorising the loan were secured, and that the advocacy of it by Michel Chevalier was justified.

ARTHUR LOUIS DUNHAM

University of Michigan.

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THE COAL-MINERS OF THE EIGHTEENTH CENTURY [1]

I

Coal-miners have always been a class apart, with mentality and aspirations unlike those of the rest of the working class. This spiritual isolation is largely a reflection of physical isolation. Living remote from the quick life of the town, the collier has developed speech and habits that effectively cut him off from his fellows. If this is so in an age of developed communications when industries are largely concentrated about the coal-fields, how wide must have been the gulf in earlier centuries when the collieries were sometimes several days' journey from the centres of urban life.

This geographical isolation had an intimate effect on the relations between employer and employed. The proprietor or lessee of a coal-mine was usually dependent on local supplies of labour: if his workers left him they could not easily be replaced, and even a temporary stoppage might destroy the capital sunk over long years in the colliery. To safeguard against such loss the owner often sought to bind the worker under a long-period contract, with penalties more or less drastic for breaches of the engagement, and labour was thus rendered immobile.

This bond system, as might be expected, was seen in its most rigid form in the more remote coal-fields. In Scotland it took the form of lifelong servitude, and the status of the worker has been described—not rhetorically but in the sober preamble to an Act of Parliament [2]—as one of slavery. Whether this slavery was a survival of the agrarian serfdom of the Middle Ages or

[1] Read before Section F of the British Association at Leeds, 1927. The paper is part of a study of the early coal industry based on the joint researches of the writer and Mr. Joseph Sykes of University College, Exeter.

[2] 15 Geo. III. c. 28.

whether it was entirely the result of legislation cannot be discussed here. It must suffice to point out that legislation certainly played some part in the making of the collier-serf. The Scottish Poor Laws of 1579 and 1597 had given the vagrant who had been sentenced the option of servitude to anyone who would undertake to keep him in employment; and his children might also be seized and kept in lifelong servitude. It is hardly likely that sturdy beggars would be regarded as desirable recruits for manufacturing establishments, but it is quite possible that they would be acceptable for the rougher work of coal-mining.[1] And an Act of 1672 specifically conferred on coal-masters the right of apprehending vagabonds and their children without the necessity of any trial in a court of law.[2]

More important, however, were the measures designed to check the movement of labour. An Act of 1606, reinforced by another of 1641, forbade the employment of any collier who was unable to present a certificate of leave from the employer whom he had last served.[3] By simply withholding a testimonial a master could bind the collier for life, and there is ample evidence that the power was widely exercised. The only remedy for the worker was to escape to England for a year and a day, or to find employment with some master who was willing to risk the penalties which the law laid down. But employment with the new master for a year and a day bound the collier to him as firmly as to the old master: one yoke had simply been exchanged for another.

Service for a year and a day was not the only method of binding. A man might enslave himself immediately by entering into an agreement with an employer and accepting "arles" as a token of engagement. These "arles" might take the form of money, or, as at Prestongrange, of a commodity such as a pair of shoes. The practice of arling, moreover, was used to ensure that the children of a collier would follow their father's occupation, and become, like him, the bond-servants of the mine-owner. A gift made to the parents at the baptism of a child was assumed to imply an undertaking to bring up the child as a collier; and though the legal validity of such arling is doubtful, sanctioned as it seemed to be by the presence of the minister at the christening, it was usually effective in binding the child for life.[4]

It has sometimes been suggested that only by an illegitimate extension of its import can the word "slave" be used as a descrip-

[1] *Edinburgh Review*, Vol. 189, p. 125.
[2] Acts of the Parliament of Scotland, Vol. VIII. p. 916.
[3] *Ibid.*, IV. 287, V. 508.
[4] *Edinburgh Review*, Vol. 189, p. 120.

tion of the Scottish colliers. In some respects, it is true, their status was superior to that of the workers on a West Indian plantation or even to that of the agrarian serfs of the Middle Ages. "They have, indeed," said Adam Smith,[1] "privileges which slaves have not. Their property after maintenance is their own, they cannot be sold, but along with the work, they enjoy marriage and religion." Further, they were paid wages, and, in some instances, very high wages; and in at least one locality they established their claim to vote as burgesses.[2] Nevertheless their legal and social status was low. They were expressly excluded from the scope of the Scottish Habeas Corpus Act[3] of 1701, and the fact that criminals were occasionally sentenced to the coal-mines for life implies that the industry was not regarded as a channel for the activities of free men. Workers in other industries refused to marry the daughters of colliers; and the cleavage from the rest of the community was not closed even by death. In Fifeshire the collier was not even allowed a grave alongside the free in consecrated ground.[4]

The emancipation of the Scottish colliers was the result of forces partly economic, partly humanitarian. The rapid increase in the demand for coal, due largely to the growth of the iron industry, required the employment of more colliers. But except in return for very high wages free labour was unwilling to work in an industry where employment involved social ostracism; and the more enlightened employers were anxious to remove the barrier. On the other hand, it can hardly be fortuitous that the Emancipation Act should have come within two years of the famous Somerset judgment of Lord Mansfield against negro slavery. And, though the reasons given in preambles to Acts of Parliament are not always those that sway the minds of legislators, we have no cause to doubt the sincerity of those who, after urging that the Act would increase the number of colliers, added that it "would remove the reproach of allowing such a state of servitude to exist in a free country."

The Act of 1774 freed the Scottish colliers by stages extending over a period of ten years.[5] Nevertheless, many of the trappings and some of the realities of slavery remained. Some of the workers failed to claim their freedom; others remained bound by economic fetters after the legal fetters had been struck off.

[1] *Lectures* (ed. Cannan), p. 99.

[2] Barrowman, "Slavery in the Coal-Mines of Scotland," *Trans. Fed. Inst. Min. Engineers*, XIV., 270.

[3] Acts of Parliament of Scotland, Vol. X. 274.

[4] *Edinburgh Review, loc. cit.*, 138.

[5] 15 Geo. III. c. 28.

The custom of making to the collier a substantial advance of cash at the time of hiring led many men into a morass of debt, and so long as this remained, workers could leave an employer only when they could find another who would repay their debts for them. In practice debt slavery replaced legal slavery. It was not until 1799 that the employer's right of retaining a debtor in his service was restricted [1] and the Scottish collier began his history as a member of an independent working class.

In other parts of the British Isles there was no such economic anachronism. In the north of England a yearly hiring of colliers was customary, and the conditions of employment were set forth in indentures entered into by employer and worker. The reasons for this are not difficult to deduce. As in Scotland, the owner's fear of a destruction of capital values which a stoppage of work would bring inclined him to a long-period contract. In an industry closely connected with the land it would be natural to adopt the yearly hiring which, for obvious reasons, was customary in agriculture. Again, the offer of a settlement, which by poor-law practice was conferred by a year's employment in a parish, was a considerable inducement to labour. And in a century when the years of war almost outnumbered the years of peace, the immunity from the attentions of the military authorities given by a long-period hiring was no small consideration.

Some of the earliest yearly agreements provide for simple gain-sharing between the parties concerned: the royalty owner, the lessee and the workers each took a third of the product; or some other simple division was agreed upon. But by the beginning of the eighteenth century the bonds provided for piece-rate payments in money, whether for getting coal or for the "dead-work" of driving levels and headings.

To trace the evolution of the bond in detail would involve many tedious technicalities. But the broad outlines are clear enough. As time went on the employers used the document as a safeguard against the combination of their workpeople and as a guarantee of quantity and quality of output; and the workers sought to insert in it safeguards against serious fluctuations in their incomes. In practice, the hand of custom was heavy and most men remained attached to one colliery for their working lives. Whatever legal freedom a collier might have, he was regarded as belonging to a colliery as a soldier belongs to his regiment or a sailor to his ship; and this was true of the man engaged under a short-period hiring, no less than of the collier

[1] 39 Geo. III. c. 56.

bound for the year. A document [1] of 1806, when industrial expansion had caused breaches to be made in the bond system, divides the workers at Heaton Colliery into :

Men belonging and bound to Heaton Colliery . .	169
Men belonging to Heaton Colliery unbound . .	39
Strangers bound to Heaton Colliery . . .	19

The strangers were from Wallsend and other neighbouring places.

The annual binding was by no means without its advantages to the workers. Under the later indentures they were guaranteed a wage of half-a-crown a day even when the colliery was idle. And that they recognised the advantages is shown by the vehemence of their protest when, in 1831, the employers of the north attempted to substitute a monthly for a yearly hiring : " The nature of the employment, the necessity of the coal-owner providing dwellings for the men in the neighbourhood of the pits, the almost distinct community which is formed by the inhabitants of each colliery village, and the great inconvenience which would arise to both parties by frequent removals and changes amongst the men, render the arrangement a necessary one." [2] And a broadsheet issued at the same time declares that a monthly hiring " would render them totally defenceless, at the whim and caprice of the masters, and anyone having a little brief authority under them."

Viewed in the perspective of a century, however, it is clear that the true interest of the working classes lies in the freedom which comes with a short-period hiring. Whatever loss of security was involved, the strike of 1844, which virtually ended the bond system, must be reckoned a landmark in the evolution of colliery labour.

Outside Scotland and the Great Northern Coalfield the prevailing arrangement was a contract made with a company of workers, rather than with individual colliers, for the performance of a specified piece of work, rather than for a specified period of time. Sometimes the entire working of a pit would be undertaken by a co-operative group, the members of which were free from external supervision. Beyond the provision of baskets, ropes and the services of one of the two drawers at the pit-head, the colliery owner took no part in the operations, and the colliers

[1] Watson Collection, Newcastle.

[2] Philanthropos, *The Two Subjects . . . in dispute between the Coal-Owners and Pitmen*, p. 5.

were apparently free to determine their own hours and methods of work.

Evidence of this charter system exists in the records of firms in all parts of Britain south of the Tees: it is revealed in the colliery books of Sir Francis Newdigate of Griff in Warwickshire; of Abraham Darby of Coalbrookdale in Shropshire; of John Barnes of Barlow, and of Benjamin Outram of Butterley, in Derbyshire; of Messrs. J. and J. Charlesworth of Wakefield in Yorkshire; of Sir Roger Bradshaigh of Haigh in Lancashire; of the Ebbw Vale Company in South Wales. In most of the early instances the whole of the men in each pit formed a single gang, usually of six to twelve men; but in the later and larger pits there might be two or more gangs at work side by side. It is unlikely that the companies of working colliers ever defined in writing the relations between individuals within the group. But in some instances entries in the colliery books lead one to infer a co-partnership system with substantial equality of status of the individual workers. At Griff Colliery in Warwickshire in 1702, for example, suggestions for changes in work were made by Sir Richard Newdigate not to charter-masters, but to the companies of colliers as a whole;[1] and the fact that two or three members of the company often signed, or set their mark on, the receipt suggests a partnership rather than a gang of men subordinate to a contractor. Again, at Codnor Park in Derbyshire an agreement to work a pit was made by six colliers,[2] all of whom were clearly equals; and when the men in the gangs at Ebbw Vale and Butterley were put on time-wages, all received the same rate of pay.

In some cases, however, the leader of the gang was something more than a mouthpiece for his fellows: at Bowling, Low Moor, and Bierley in Yorkshire he came to be known as a "pit taker" who contracted to get coal at so much a dozen corves, provided a gin horse, paid men, boys and women a weekly wage, and pocketed the difference.[3] And in 1826 at Coed Talon in North Wales a charter-master who was paid 3*s.* a yard for driving crosses handed over 2*s.* 4*d.* to the men in his gang and kept 8*d.* as his own profit.[4] When the system took this form the principal line of cleavage in the industry was between labour and the contractor; and it is noteworthy that when strikes occurred, as in

[1] Coal Book for ye Great Rider, Muniment Room, Arbury Hall.
[2] Agreement Book, 1800, Butterley Company's Records.
[3] Cudworth, *Histories of Bolton and Bowling*, p. 238.
[4] Watson MSS., Newcastle, 3016.

Staffordshire in 1816, they were directed not against the owners of the collieries, but against the intermediary charter-masters.[1]

Some clear cases of co-operative production in the eighteenth century, and some equally clear cases of sub-contracting in the nineteenth, support the view of Thomas Tancred, in the First Report of the Midland Mining Commission,[2] as to its origin :

> " I am inclined to believe that the ' pits company,' as the miners working together in a pit are still called, used in former times to engage in a body with the proprietor to raise the mineral at a given price per ton; and that there was a head man of the company chosen by the rest for his superior experience or age, hence called a gaffer, who entered into the contract in the name of the rest, directed their operations, and worked along with them, all having a common interest in the concern like the crew of a fishing-boat, or like the miners in Cornwall."

The word " gaffer " itself, it is pointed out, originally implied an elder, and in Shropshire " butty " conveyed the idea of a partner. But when Tancred wrote in 1843 the import of these terms had changed : [3]

> " Butties . . . or gaffers . . . are contractors, or charter-masters, who, having in general been themselves working miners, or the sons of butties who have risen from that class, are enabled by the accumulation of some little capital, or by the assistance of relations, to take a pit, either singly or two or three in partnership, and to enter into a bond to raise the mineral . . . at a given price, called a charter, per ton, for the proprietor or lessee of the mine."

By a process for which there are parallels in the fourteenth, and probably in all succeeding centuries, the more powerful personalities among the workers, having acquired a little capital, ceased to be simply leaders and became masters, intervening between the men of property and the working colliers. The more or less democratic co-partnery of earlier times, it would seem, had as its degenerate offspring the hated butty system of the nineteenth century.

[1] Annual Register, 1816, p. 13. [2] P. xxxiv. [3] *Ibid.*

II

The practice in most of the English coal-fields of paying labour collectively makes it exceedingly difficult to trace the course of individual earnings. And even where individual colliers were paid directly the records are concerned not with the amount earned per day or per week, but with the rate paid per score of corves of coal hewn and drawn to the surface, or the rate per yard of level driven underground. Since these must obviously vary with geological features, a comparison of rates between one colliery and another, or between one period and another, tells us nothing as to the real reward of effort. For this we must rely on the statements of observers of the colliery population, and on those entries in colliery day-books which refer to the earnings of what are now termed "datallers"—men engaged in repairing roads and other dead-work. Piece-workers would probably make somewhat more than these.

According to a treatise entitled *The Compleat Collier*, at the opening of the eighteenth century the day-rate for hewers and sinkers in Durham was 12 or 14 pence.[1] At Gatherick in Northumberland earnings seem to have been only 7½*d.* a day.[2] But this was probably an unduly low wage. At Pontefract in 1703 the Justices fixed the maximum for colliers at 12*d.* a day,[3] and at Shibden Hall, near Halifax, the actual earnings were 10*d.* to a shilling.[4] In 1709 hewers at Whitehaven [5] made 10*d.*, and about the same time miners' wages in Scotland seem to have been 1*s.* 2*d.* a day.[6] In the English Midlands, however, they were at a somewhat higher level. The records of the Newdigate family give plentiful evidence of a normal rate for hewers in 1701 of 18*d.* a day at Griff Colliery in Warwickshire. Probably we shall not be far out if we put colliers' earnings generally at between 12*d.* and 18*d.* during the early years of the century.

Changes in rates occurred but rarely. At Shibden Hall in 1723 getters and winders together had 1*s.* 8½*d.* a day, which would mean that the getter had probably about the same wage as in 1714.[7] According to a modern writer [8] wages in Northumberland and Durham increased 30 per cent. following a rise in the price of coal in 1739; and, according to another, pitmen in

[1] P. 29.
[2] Bulman and Redmayne, *Colliery Working and Management*, p. 41.
[3] V. C. H., Yorks.
[4] Wheater, *Old Yorkshire*, p. 280.
[5] Galloway, *Annals*, p. 218.
[6] Bald, *General View of the Coal Trade*, p. 16.
[7] Wheater, *loc. cit.*
[8] Welbourne, *Miners' Unions*, p. 14.

1740 earned from 1*s.* 6*d.* to 1*s.* 10*d.* a day.[1] Support is given to the statement by the rates paid at Lumley Main and Byker Main in 1745. At the former the hewer obtained 1*s.* 9*d.* and at the latter 1*s.* 6*d.* for a standard output—presumably the recognised daily "stint."[2] It is possible, however, that the increase was not retained, for in 1751 sinkers at Benton Colliery had only 1*s.* 3*d.* and 1*s.* 4*d.* a day; and a collier of ninety-three, who began work at the age of six or seven, informed J. R. Leichfield in 1841 that when he was a "foal" hewers at Morpeth obtained only 1*s.* 4*d.* a day.[3]

Illustrating his thesis that slave labour is dear and free labour cheap, Adam Smith put the wages paid on the Tyne in the 'sixties at a still lower level.[4] If the Scottish colliers were free, the argument ran, the price of their labour would fall: "At Newcastle the wages exceed not tenpence or a shilling, yet colliers often leave our coal-works, where they have half-a-crown a day, and run there, though they have less wages, where they have liberty." Coming as he did from Kirkcaldy, Adam Smith would know what he was talking about when on the topic of collier slavery. But, if he was correctly reported, it would seem that he was misinformed as to the wages of colliers in England. The Lectures from which the passage is taken were almost certainly delivered in the session 1762–3 or 1763–4. It is to be regretted that we have no colliery books of the Newcastle area for these years. But it has been shown that some years earlier earnings were certainly higher; and the estimates of contemporaries suggest a rise rather than a fall during the early 'sixties. When M. Jars visited Durham in 1765 he recorded the average earnings at Walker Colliery as 2*s.* to 2*s.* 6*d.* a day.[5] And in the same year the *Gentleman's Magazine* [6] stated the earnings of Tyneside colliers as between 12*s.* and 14*s.* a week. Though one would expect the *Gentleman's Magazine* to put a good complexion on affairs at a time when the colliers were on strike for higher earnings, it was almost certainly nearer the mark than Adam Smith. Another Scot who, six years later, estimated the earnings of the Newcastle collier at 9*s.* a week perhaps hit the right figure.[7]

[1] *Trans. North of Eng. Mining Engineers*, XV. 205.

[2] Bulman and Redmayne, *op. cit.*, p. 43.

[3] Children's Employment Commission, App. (1842), p. 574.

[4] *Lectures of Adam Smith* (ed. Cannan), p. 99. Cited Galloway, p. 283.

[5] *Voyages Métallurgiques.*

[6] P. 430.

[7] John Miller, *Origin of Ranks*, pp. 289-90. Cited *Edin. Rev.* Vol. 189, p. 145. In the Barnsley area wages varied between 7*s.* and 9*s.* a week in 1770. *V.* Hoyle, *History of Barnsley*, p. 102.

For other parts of England we are fortunate to have the unbiassed evidence of colliery documents. A manuscript in one of Sir Roger Bradshaigh's coal books at Haigh shows that in 1758 the Wigan collier was paid 10*d*. a load, and that when he obtained twelve loads in a week he received a bonus of sixpence.[1] The amount set down as a sample week's earnings is 10*s*. 10*d*., allowing 4*d*. for odd baskets. If the collier worked six days a week, he would thus make about 1*s*. 10*d*. a day. The colliery book of John Barnes for the pits at Barlow in Derbyshire show a normal day-wage for hewers between 1764 and 1776 of 1*s*. 6*d*., and the same rate was paid for driving underground ways.[2] And a Day Book of the Duke of Bridgewater [3] gives evidence of a regular payment of 1*s*. 8*d*. a day to men engaged in tunnelling and similar work in 1769 at Worsley. Probably at both Barlow and Worsley the coal-getters would make somewhat more when paid, as they usually were, by the piece.

It must be admitted that the data so far presented will not bear any weighty generalisation. It is remarkable, however, that wages in Lancashire and Derbyshire in the 'sixties should be virtually the same as those paid in Warwickshire at the opening of the century. This rigidity of wages can be illustrated, over shorter periods, from the records of individual collieries. As already observed, 1*s*. 6*d*. was the normal day-wage at Griff in 1729, as in 1701. At Barlow 1*s*. 6*d*. was the regular day-wage each year between 1763 and 1776. And at Coalbrookdale 5*s*. 3*d*. a waggon-load was paid to the charter-master alike in 1768 and 1780.[4]

From 1715 to 1765 the tendency of general prices was downward.[5] But there were three brief periods of deficient harvests and high prices of food-stuffs—the years 1727–8, 1740, and 1756–7. In each of these periods the real income of the workers fell violently and their dissatisfaction burst forth into violence directed against the millers and bakers, who, since they gained by the upward swing of prices, were generally held responsible for the movement. The Home Office papers make it abundantly clear that in these disorders the compact, class-conscious colliers took a foremost part. Space will not permit of a description of the riots. It must suffice to record that in this period of stable wages

[1] Muniment Room of the Earl of Crawford at Haigh Hall

[2] In the possession of Edwin Barnes, Esq., of Ashgate.

[3] Bridgewater Offices, Walkden. Matthew Shelvocke's First Day Book, 1769.

[4] Waste Books, Coalbrookdale Co., Shropshire.

[5] Tooke, *History of Prices*, Vol. I. p. 40.

the animosity of the workers was directed against the traders and not against their own employers. In North Wales, in 1740, the riotous colliers actually claimed the support of their master, Sir Thomas Mostyn, and in 1756 arrested Nottingham colliers sought shelter behind the name of the great coal-owner, Lord Middleton.[1]

From the outbreak of the American War wage-rates became more flexible, and from 1775 to 1815 the general movement was upward. Between 1776 and the close of the record in 1779 there is a distinct tendency for the rate at Barlow to rise from 1*s.* 6*d.* to 1*s.* 8*d.* a day. A few years later an American observer remarked that each Lancashire collier produced about a ton a day, and added that the miners' wages were 2*s.*, and the labourer's about 1*s.*[2] By the middle of the 'eighties the upward swing was marked. In 1787 at Middleton Colliery near Leeds [3] earnings varied between 2*s.* 6*d.* and 3*s.* a day, and none, it was stated, got less than 2*s.* At Wigan in the same year 2*s.* 6*d.* a day was paid for driving levels.[4] And in the same year again the Staffordshire colliers were on strike for an advance to 3*s.* a day, though it appears unlikely that they were successful.[5] When the Butterley records begin in 1790 they show a day-wage for sinkers of 2*s.* 2*d.*, and in the following year at one pit eight sinkers received 2*s.* 3*d.*, three 2*s.*, and eight 1*s.* 6*d.*, while five labourers got 2*s.* a day each.[6] In 1795 wages of underground workers here were 2*s.* 4*d.* and 2*s.* 6*d.*, and in 1796 at Ebbw Vale in South Wales day-work men received sums varying from 1*s.* 7*d.* to 2*s.* 6*d.*, with the norm at 2*s.* Piece-work earnings would almost certainly be higher.[7] During the last decade of the century an increase of 33 per cent. was obtained by the pitmen in the north of England, for whereas about 1790 the standard price for hewing a Newcastle chaldron was 1*s.* 6*d.*, in 1800 it was 2*s.*

This increase was, of course, part of the general rise of prices resulting from war and currency inflation. But there were also special forces operating on miners' wages. It was the period when the full fruits of inland navigation were being reaped, and new demands for coal were coming from districts which had previously hardly known the sight of it. Above all it was the

[1] S.P. Dom. Geo. II. 50/143; 135/75.
[2] V. C. H., Lancashire, p. 358.
[3] *Leeds Mercury*, Jan. 2, 1787. Cutting in Bell Coll.
[4] Records at Haigh Hall.
[5] Letter of James Watt to Matthew Boulton, Oct. 11, 1787. Birmingham Reference Library.
[6] Butterley Cash Book 1790–6.
[7] MSS. of Ebbw Vale Co.

period following Henry Cort's revolutionary changes in the technique of iron production. In Scotland, in Cumberland, in Yorkshire, Derbyshire, Staffordshire, Shropshire and South Wales new furnaces were being constructed with almost feverish haste; [1] and each meant a substantial increase in the demand for coal. The iron-works and foundries of Carron and Clyde, it was said in 1793, "alone consume as many coals as all the inhabitants of Edinburgh." [2] For the country as a whole the increase in demand must have been prodigious.

At Howgill Colliery in Cumberland in 1800 daily wages were about 3*s.*: of seven colliers who worked an average of just under five shifts in one week six obtained between 14*s.* and 14*s.* 6*d.*, and one 12*s.*[3] In 1802 at the pits of the Tredegar Company in South Wales 2*s.* 6*d.* was the regular day-wage for colliers, and, no doubt, getters would obtain more.[4] The following year at Bowling in Yorkshire the getter and hurrier jointly received 3*s.* 11*d.* a day, which was divided between them in the proportions of two to one; [5] and about 1905 at Rothwell it was considered a good day's work to fill eighteen corves at 2*d.* and two corves of slack at 1*d.*, which brought in 3*s.* 2*d.*[6]

To the colliery proprietors and their friends these rates appeared exorbitant. "The wages of an ordinary collier, at most works, is better than the pay of a lieutenant in the army," protested Dr. MacNab in 1801, and from all fields, with one exception, there was a cry of shortage of labour. "Miners are so exceedingly scarce, and their wages so extravagantly high," says the same authority, "as to enable them in general to live upon the wages of the labour of two-thirds of their time, and . . . the remaining third is spent in idleness and dissipation." [7] The exception was the Northumberland and Durham coal-field, which was said to be "well-peopled." It is significant that this was the one large colliery area which, since its coal was unsuitable to smelting, was not being covered with iron-works.

Yet even in the north of England earnings rose rapidly in the early years of the new century. The steam-engines of Watt and Trevithick and numerous other minor inventors intensified the demand for Newcastle coal no less than for that of other

[1] Report of Committee on Coal Trade (1800), p. 647.
[2] Letter of a Noble Lord.
[3] Accounts of Howgill Colliery, Watson Coll.
[4] Tredegar Company's MSS.
[5] Cudworth, *History of Bolton and Bowling*, p. 239.
[6] Batty, *History of Rothwell*, p. 187.
[7] H. G. MacNab, *Letter to John Whitemore* (1801), pp. 43, 51.

areas. In the year 1800, according to the statement of a well-informed observer,[1] the Newcastle collier made 2*s*. 6*d*. to 3*s*. a day, or 16*s*. a week. In 1805 a substantial advance took place not only in the rates of pay, but also in the hiring money paid on binding; and from every side came complaints of a shortage of pitmen. Consciousness of economic strength is instinct in every line of the following document, euphemistically headed "Petition of Pitmen, 1805": [2]

> "To the gentlemen of Heaton Colliery We are all agreed to this petition to have 6*s*. a score for 24 peck Corfe, winen Headway 2*s*. per yeard, walds 1*s*. 10*d*. per yeard, Narrow bord 1*s*. 8*d*. per yeard, for Ramel 6*d*. per day, dubel working 6*d*. per day, wet working 6*d*. per day either a Bove head or under foot, under the top 6*d*. per day, and for men to have 10*s*. per week Smart money, and have notting to do with puting or driving, for lades 2*s*. per day driving, for waggons driving 1*s*. 6*d*. per day, for trappers 1*s*. per day, for a trame 4*s*. 6*d*. per day and lads 5*s*. per week smart money, and our money paid every week, and we mean to have our house and fire free and to have a Surgan and bonesetter to be paid by the gentlemen and have smith to do picks 1*s*. for chicking and laing 4*d*., all men mean to have a chance of Boreing Cole, and all that is going, and for the Broken 5 per score 24 peack Corf."

"Smart money" was compensation paid in illness, and the demand for 10*s*. a week for men and 5*s*. for boys indicates an anticipated weekly wage for those in health and work of a very much larger sum. If drivers were to have 2*s*. a day and even the infant trappers 1*s*., hewers would surely expect to earn 3*s*. 6*d*. or 4*s*.

In 1809 at Jarrow wastemen obtained £1 a week, and even screeners and banksmen 2*s*. a shift. By the bond of 1812 the employers guaranteed their hewers 2*s*. 6*d*. a day even if the pit were idle, and it may be presumed that actual earnings were well above this minimum. In 1813 they were said to be 3*s*. 4*d*. In Yorkshire at Rothwell 3*s*. 2*d*. was the reward of a good day's work in 1812.[3] Two years later at Ebbw Vale in South Wales datallers had 3*s*., an advance of 50 per cent. on the wages of 1796. Piece-workers must have earned considerably more.

[1] MS. Summary of condition . . . of pitmen on the Tyne in 1800, by W. Thomas of Denton Hall to Sir John Swinburne.

[2] Watson Coll., Newcastle.

[3] Batty, *History of Rothwell*, p. 187.

The figures are too scanty to allow of any close correlation with prices of commodities. But if we can put the general wage in 1780 at 1*s.* 8*d.*, as it undoubtedly was at Barlow, and the general wage in 1813 at 3*s.* 4*d.*, as it was in Durham, we can say that wages had more than kept pace with prices, but had advanced slightly less than the cost of living as expressed in the recently constructed index-numbers of Dr. Silberling.[1]

Moreover, improvements in underground transport had increased the number of relatively highly-paid hewers and diminished the number of the less well-paid bearers or putters. At a colliery at Bo'ness in 1681 there were 37 bearers to 13 hewers, and at Dunmore, in 1769, 74 bearers to 28 hewers.[2] Even in Northumberland and Durham, where the crude system of bearing had long been discontinued, there were at Charlaw in 1767, 10 barrowmen to 10 hewers.[3] But by the beginning of the nineteenth century the hewers always outnumbered the putters: at Heaton Colliery in 1806 there were 143 hewers to 84 putters, at Middleton in 1808, 90 hewers to 60 putters, and at Washington in 1813, 67 hewers and 40 putters.[4]

III

When payment was made, the sum handed over did not necessarily correspond with the actual earnings since the previous pay. There is evidence from coal-fields as far apart as Durham and Glamorgan that the collier entered his term of engagement in debt to his master, and domestic incidents, like death or the birth of a child, often drew men into deeper indebtedness.[5]

Again, there were subtractions for coal and rent, for candles and gunpowder and for the sharpening of tools. More important still were the fines for neglect, for defective work, or for absence from the colliery: the Duke of Bridgewater, for example, levied a fine of half-a-crown on every man who did not present himself for work on Monday morning.[6] Further deductions were made for intermixture of stone or slack in the round coal—a source of perennial grievance to the pitmen of the Tyne and Wear. But it was not only for such offences that the miner suffered. In

[1] "British Prices and Business Cycles, 1779–1850," *Review of Economic Statistics*, Oct. 1923.

[2] Barrowman, *op. cit.*, pp. 274–5.

[3] Charlaw Bond, in possession of Colonel Blackett.

[4] MSS. in Bell and Watson Collections, Newcastle.

[5] *E.g.* "4 Nov. 1770. By Cash lent William Berry Collr. to bury a child—10*s.* 6*d.*" Matthew Shelvoke's Day Book No. 2, 1770, Bridgewater Colliery.

[6] Smiles, *Life of Brindley*, Chap. V. p. 231.

Northumberland and Durham he might be fined half-a-guinea for keeping swine, 5*s*. for a donkey or a cow, 18*d*. for a dog, 6*d*. each for pigeons, and so on.[1]

Almost any departure from routine operations was marked by the provision of ale and sometimes of food. In a heavy frost in the winter of 1770–1, bread, cheese and ale were supplied to colliers who worked all night at the Bridgewater pits.[2] And at Barlow ale was a common solatium for work in wet or inconvenient places. Compensation for work of special difficulty was, however, generally made in money. The payment of 2*d*. a day "to mend wages" was common at Griff in the early years of the century; and in the Bridgewater records of the seventeen-sixties the same allowance is frequently found. *E.g.*:

> "3 Nov. 1766. Paid Jn°. Newton for 24 weeks and $3\frac{3}{4}$ days work being an additional allowance of 2*d*. p day
> £1 4*s*. $7\frac{1}{2}$*d*."

Bounties were paid, moreover, for regularity of work and output. The payment of a premium of 6*d*. when a certain weekly output was reached at the Haigh Colliery of Sir Roger Bradshaigh has already been mentioned. In 1816 at Rothwell in Yorkshire the employer gave an extra sum of 4*s*., known as "taking brass," as an inducement to work a full week of six days;[3] and in a Lothian colliery bond of 1827 the workers agree to forfeit the bounty if they do not fulfil the conditions laid down.[4]

A very common arrangement was that whereby the employer paid to the workers each week or fortnight a "subsistence" which did not bear any necessary relation to the earnings of the period; at intervals the account of each man was reckoned and the balance handed over. The system was in operation at Griff in Warwickshire at the beginning of the eighteenth century. Its existence about the same time in South Wales is shown by a letter in which the cutters and drivers of Sir Thomas Mansel's collieries at Briton Ferry and Baglan, complaining of the competition of the collieries near Berry, informed their employer "that ye Subsistence we have weekly receiv'd of your agent John Burrough much exceeds ye Coal shipt whereby we are and have bin consid'ble Debtors unto your Hon'ble throughout ye Late

[1] *A Candid Appeal to the Coal Owners and Viewers* (1826).
[2] Matthew Shelvoke's Day Book, March 4, 1771.
[3] Batty, *History of Rothwell*, p. 187.
[4] Cunningham, *Mining in Mid and East Lothian*, p. 40.

Winter." [1] And more than a hundred years later, on Nov. 6, 1826, a letter from John Grey written from Hartsheath Park proves the existence of the same practice [2]: "You will please to allow the subsistence as usual as the men have paid us all arrears . . . the subsistence is to be 5*s*. per week to each person." The advantage of the arrangement at Culross, where a subsistence was paid each fortnight, and the balance of earnings once in every three or four months, is set forth in a pamphlet [3] of 1793: "This mode of paying them made them economical, and the arrears enabled them to provide themselves with good clothes, household furniture, etc. and to lay in a supply of beef for their families in November." On the other hand, by providing a minimum below which the weekly income could not fall, when the worker was in employment, it constituted a guarantee against undue fluctuations in the standard of comfort—a guarantee reinforced by the "upstanding wage," paid in the Great Northern Coalfield to the bound collier even when unemployed.

The method was of no less advantage to the employer, for under it he was able to defer part of his wages bill until such time as he found himself with sufficient ready cash. The provision of money for the wages of a large body of relatively well-paid labour can never have been an easy task, and at times of financial crisis it became one of extreme difficulty. In the stringency that marked the outbreak of war with France in 1793 the proprietor of Hasland Colliery in Derbyshire was forced to procure coin of small denomination from local tradespeople. On Jan. 28, for example, one E. Bawn advanced £20 in silver and copper to Richard Clay, the manager of the colliery; and on July 20, £12 5*s*. was provided, of which £2 10*s*. was in halfpence. On Jan. 9 of the following year no less than £139 was paid to George Taylor, a chandler and oilman, for halfpence supplied to the colliery, and at the restriction crisis of 1797 Taylor advanced £200 in the same small change. It seems possible that halfpence were the only form of currency available.[4]

The proprietor of this colliery, John Broxupp, also owned a farm, and it was but natural that some of the produce should find its way to the men engaged in the coal-works. On May 29, 1789, for example, a Richard Ashley received five quarters of wheat, valued at £5, as payment for the carriage of coke. In the

[1] D. R. Phillips, *History of the Vale of Neath*, p. 236.

[2] Watson Coll.

[3] Description of the Estates belonging to the Earl of Dundonald at Culross (1793), p. 67.

[4] Hasland Colliery Book.

following year the manager, Richard Clay, was debited with several sums for "beef to colliers," obviously supplied from Broxupp's farm. It appears likely that some of the colliers with families would lay down supplies of meat for the winter, out of their autumn wages. For between Sept. 18 and Nov. 27, 1793, no less than £53 2*s.* 5*d.*, and between Sept. 17 and Dec. 7, 1794, £66 2*s.* was paid to them in the form of beef. From 1799 onward substantial sums were given to Elias Elliott, Richard Clay's successor, for "housekeeping"—£100 on Dec. 23, 1800, £500 on April 11, 1803, £567 9*s.* 4*d.* on July 23, 1804, and so on. For the year 1806, £657 was paid in all under this head, and each year thereafter sums of a like magnitude. It is impossible to give a meaning to the word "housekeeping," but since Elliott's own earnings were only £25 a year, some form of payment in kind to the workers seems to be indicated. From 1805 Broxupp began the purchase from neighbouring farmers of barren cows: in this year ten were purchased, in 1807 sixteen, in 1808 fifteen; and though no further reference is made to them, it seems not unlikely that the cattle were bought as food for the colliers.

On the Tyne and Wear rye was the staple diet of the colliery population. In an estimate of the cost of getting a chaldron of coal at Chapple Colliery in 1796, the sum of 8¼*d.* is deducted from the gross expenses on account of rye for the workmen, who evidently paid for it by a stoppage from wages; and in 1800, when the price of rye was 11*s.* a quarter, employers on the Tyne commonly supplied it to their colliers at 5*s.*

Provision of food from a farm attached to the colliery, and sale of grain below market price were surely harmless, if not actually beneficial to the miners. But in some places the provision of commodities by the employer became a serious social evil. Before 1662 the pitmen of Newcastle had sometimes been forced to accept their wages in the form of corn,[1] and in 1765 it was found necessary to protect the coal-miners of Ireland by prohibiting payment in coal.[2] The author of a pamphlet written in 1793 denounces "the dirty and mean practice" of Scottish owners who acted as sutlers, and not only made a direct profit by selling household commodities to the colliers at advanced prices, but also took a share of the gain on the beer and whisky sold by the overmen to the miners.[3] In the north of England also the same evil existed. "It is not unusual for Lessees of

[1] Welbourne, *The Miners' Unions*, p. 4.
[2] *Trans. Inst. Min. Engineers*, XIV. 188.
[3] Description of the Estates . . . at Culross, p. 55.

Mines to be concerned in Breweries," wrote W. Thomas in 1800, " and to have Public-houses taken attached to the Colliery which they make their pay houses, and frequently the inferior Agents such as Overmen, etc. keep Ale houses and retail shops where the Pitman is often obliged to purchase Articles for himself and family at exorbitant prices, merely from having involved himself in a load of debt which the Shopkeeper too frequently leads him into."

This association of debt with the truck system can be illustrated from the books of the Tredegar Company in South Wales. A typical entry in the " Rough Pay Book " of the Abercarn Mines for 1802 exhibits a collier, John Raper, in debt to the extent of a guinea for cash advanced, 4*s.* 4*d.* for clogs, £1 14*s.* 3*d.* for beef, and £1 2*s.* 3*d.* for sundry other commodities. Other miners were indebted for sums ranging from twopence to fifteen pounds. A " Stoppages Book " for the following year shows indebtedness of colliers for clogs, clog clasps, helves, gunpowder, baskets, oats, malt and hops, and even backstones; and sometimes charter-masters were debited with the cost of tools supplied to the men in their gangs. What proportion of the household necessaries of a collier's family were received from the employer it is impossible to say. It was certainly no small one. A " Provision Shop Book " of the same colliery for the year 1821 gives the names of fifty-eight persons who owed the company an aggregate of £620. Of this one Ann David owed no less than £180 7*s.* 11*d.*, and a William Jones, who is specifically described as a miner, owed £132 8*s.* 2*d.* A similar system existed at the works and collieries of the Ebbw Vale Company. In July 1814 the debts of colliers for houses, coal, oil, tools and other commodities varied from 6*d.* to £242 5*s.* An inventory of 1824 shows that the Company's shops, which sold provisions and household necessaries of all kinds, had a stock valued at no less than £2,120 3*s.* 4*d.*

The late Professor Unwin laid stress on the effect of currency difficulties in stimulating the growth of a truck system in the cotton industry.[1] Although instances can be found here and there before the outbreak of the wars with France, it can hardly be fortuitous that in none of the records used as the basis for this essay is there a sign of a truck system before the last decade of the century. Neither at Griff, nor Coalbrookdale, nor Haigh, nor Worsley, nor Barlow, nor Butterley, nor Newcastle is there evidence of any but cash payments. Like the butty system, truck developed in response to a real economic need. The two

[1] *Samuel Oldknow and the Arkwrights*, Chap. X.

sprang up in the same soil; both were the product of a relatively early stage of capitalism; and neither, it is worth noting, ever obtained a firm hold in the large-scale mining concerns of Northumberland and Durham.[1] When, elsewhere, they had ceased to be necessary and had become problems, the evils of truck shop and butties were found to be inextricably intertwined. It was not, however, in the eighteenth century, but in the early and middle years of the nineteenth, that this monstrous crop of oppression and social disharmony came to harvest.

IV

That in money wages the coal-miner was better off than most other workers is beyond doubt. In 1771 the Fifeshire collier made 12*s.* a week, against 4*s.* earned by the agricultural labourer, and though in England the difference was less marked, the collier had 9*s.* against the 6*s.* of the labourer.[2] "A collier working by the piece is supposed, at Newcastle, to earn commonly about double, and in many parts of Scotland about three times, the wages of common labour," wrote Adam Smith in 1776,[3] adding that these high wages "arise altogether from the hardship, disagreeableness and dirtiness of his work." The Newcastle collier, with 15*s.* a week, is, moreover, the most highly-paid wage-earner in a list compiled by Arthur Young; and the Wakefield collier, with 11*s.*, stands well above not only the agricultural labourer, but also the skilled craftsman in the textile and pottery industries.[4] At the beginning of the nineteenth century, according to the MS. of W. Thomas of Denton Hall, the northern collier would earn 16*s.* a week, against 9*s.* made by the common labourer in husbandry. And though, with the coming of the factory system, industrial wages in general increased, in the early 'forties of the nineteenth century boys in the manufactories of South Staffordshire had only a third or a half the wages of those in the mines,[5] and the superiority of the miner's position in later years was acknowledged in a Lancashire song:

> "Collier lads gets gowd and silver,
> Factory lads gets nowt but brass."

Apart from personal income there were several broad respects

[1] Midland Mining Commission, cv.
[2] Miller, *Origin of Ranks* (1771), pp. 289–90. Cited *Edin. Rev., loc. cit.*
[3] *Wealth of Nations*, Book I. Chap. X. Pt. i.
[4] *Northern Tour*, IV. 471.
[5] Children's Employment Commission (S. Staffs), 10.

in which the circumstances of the collier were deemed advantageous. In an interleaved copy of *A Voice from the Coal Mines* in the Newcastle Public Reference Library a hostile critic has written: "Collier better off than other labourers because he can employ his children at 7 or 8"; and at an earlier period Mr. Thomas pointed out that a collier with three or four sons at work might have his family income increased by twenty or thirty shillings a week.[1] A less equivocal advantage than that of employing his children in infancy arose from the type of seasonal variation to which the demand for his own labour was subject. It was only in Northumberland and Durham that the hazard of carrying coals by sea sometimes produced a slack winter season. Elsewhere the colliers, unlike other workers, were then at their busiest, and if unemployment came it was in the summer months, when there were opportunities of temporary work in agriculture.

Again, since the collier never went short of fuel, he was exempt from many of the ills that beset his fellows in other industries. "Among the poor it is, generally, the employment of one person in a family in the winter season for three hours more or less every day to seek firewood," says an author of 1769. "Labourers in the south are obliged to endure wet and cold in a very great variety of their work, and when they come home at night, poor victuals and a cool chimney corner is their general fare; they have neither time nor fire enough to dry their stockings, cloaths, etc., before the next morning, when they put them on again damp as they are; and the repetition of this hardship chills their blood, and throws them into agues." The incidence of this complaint, it was said, was eight times as heavy in Dorset as in Durham.[2] The shortage of fuel outside the areas of coal-mining became accentuated as population increased, and the enclosure of the wastes further limited supplies. Eden points out that in the south the labourers subsisted on bread and cheese with beer or tea, and that they considered themselves in a state of great comfort if they could eat meat once a week, when the hot Sunday dinner had to be cooked by the baker. In the colliery areas, not only did the working-class families make their own bread, but they were able to have hot dishes every day.[3]

Social distinctions are less susceptible of definition than the

[1] Thomas, *Summary of the Condition of the Pitmen.*
[2] *A Treatise upon Coal Mines*, 1769, anon.
[3] Eden, *State of the Poor*, I. 496.

economic distinctions that can be exhibited in rates of wages. But it is manifest that the collier was conscious of social superiority when he was set alongside other workers. It was the custom at many collieries to hold an annual feast, the cost of which was met by the proprietor. At Worsley the beef provided for the Christmas dinner of the labourers in 1767 cost the Duke of Bridgewater 3½*d.* a pound, that provided for the colliers 4*d.*[1] It is one of those trifles that throw into relief the lines of social cleavage within what is too often regarded as a homogeneous working class.

Generally the miners lived in villages where the whole community was concerned with the one occupation of getting and carrying coal. Apart from a grocer, a butcher, and one or two publicans, there were no shopkeepers and no members of the middle class. In an area of twenty square miles occupied by the Kingswood colliers there was no Established church and only one small Nonconformist chapel. Kingswood was only three or four miles from Bristol, Bedworth about the same from Coventry, yet the miners had no part in the lives of these cities. To the traders and shopkeepers the colliers appeared in the same light as the barbarian tribes to the townsfolk of a Roman garrison on the outskirts of the Empire, and when the colliers came to town they bolted their doors and barricaded their windows.[2] During the riots of 1756 the Warwickshire colliers levied a contribution on several villages under threat of destruction. For many years the Kingswood colliers imposed a danegeld on the parish of Bitton; and neither Bristol, Bath, Gloucester nor Hereford was free from their predatory raids.

Observers of the colliery population were unanimous in condemnation of its coarse manners and brutal sports, among which bull-baiting and shying at cocks figured largely. The Scottish colliers, it was said, were "savage and brutal in their manners, destitute of all the principles of religion and morality, perfectly indifferent to the opinion of the world."[3] In 1720 a collier sold his wife for five shillings in the market-place of a Staffordshire town[4]—and if her reputation was at all like that given to the

[1] William Brough's Day Book, 1768:

3 May 1768 Paid Jas Hart for Beef for Colliers 196 lbs. at 4*d.* p. lb. £3 5*s.* 4*d.*

Paid Jas Hart for Beef for labourers at Christmas last 230 lbs. at 3½*d.* per lb. . . . . £3 7*s.* 1*d.*

[2] Eayrs, *Wesley and Kingswood*, p. 42.

[3] Bald, *op. cit.*

[4] Hackwood, *Staffordshire Customs, Superstitions and Folk-lore.*

wives of northern colliers she was dear at the price! "The wives of Pitmen," says W. Thomas, "are in general a very indolent set of women—either strangers to cleanliness, frugality or economy. It is no unusual thing to see a Pitman, his wife and family, the first week after the receipt of their wages, indulging themselves in the use of animal food three times a day, and the next living on a little rye bread with oatmeal and water. Except in harvest, when they employ themselves in harvesting and reaping, the women seldom do more than attend to the necessary calls of the Family, and that in a lazy, idle manner." This indictment, however, was written a generation after women had ceased to be engaged underground in the Northern Coalfield. In Cumberland, Lancashire, and some of the Midland counties women still worked as "hurriers" in the pits; and whatever other charges he may lay at their door, the reader of Bald's account of the wives of the colliers of Fife and the Lothians will at least acquit them of indolence. In these areas where women worked underground, life in a mining village was a grim business.

It would be wrong, however, to paint the picture of collier life without some relief. The mining population of this period was no more devoid of vigorous personalities than in later times. George Stephenson, it should not be forgotten, was a collier; and before and after him, many of the devices from which modern railway transport has been built were worked out by men whose lives were lived about the pit hills and the underground ways of Northumberland and South Wales. Others there were whose spirits found release in pure rather than applied science: among them William Fluelling, the learned collier of Mangotsfield, who, dying in 1773 at the age of eighty-six, attained the altitude of a rhymed epitaph in the *Gentleman's Magazine* [1]:

> "Beneath this humble turf there lies
> An honest miner, learn'd and wise.
> To latest life from early youth
> His search was philosophic truth.
> . . . . .
> In nature's book, by nature taught,
> He learn'd to think as Newton thought;
> And with an astronomic eye
> Measured the rolling orbs on high."

A student of Halley and Kiel, he often spent whole nights in gazing at the stars, and from his wages, earned in the pit, he had laid out £30 in scientific works. He ground lenses, con-

[1] 1773, p. 614.

structed telescopes and microscopes, and was the author of an almanack.

Then there were the heroes of Methodism: Robert Haslem, the Yorkshire cock-fighter, whose conversion and death on the pit hill in 1779 was recounted in verse by the poet Cowper [1]; Victor Purdy of Kingswood, the author of nearly two thousand hymns, who established what was surely more than a local record by reading through the Bible forty times [2]; and Joseph Rawlings of Wednesbury, who, filled with remorse at having ill-used Wesley when he visited the district in 1749, himself became a pit-head preacher. "This very singular pastor," says a newspaper [3] of June 1791, "was blind; but he worked, nevertheless, on the week-days as a collier, and, what was more extraordinary, he distributed the greater part of his earnings amongst his auditors in cases of sickness."

The isolation of the colliery village from the life of a larger community was, indeed, never so complete as that of the agricultural hamlet, for it was broken occasionally by the migration of miners from one colliery to another. "The conditions of working and their wages, are for the most part so hard, as causes the works often to be deserted and forsaken," says a writer [4] of 1707. "And it is usual with the workmen if they can hear of another place where they may find better wages, to leave both the work and their masters." Between one coal-field and another, moreover, there was a flow of specialised labour, a mere trickle no doubt, but sufficient to act as an intellectual leaven, and perhaps, incidentally, to maintain congruence in the rates of wages. The occurrence of a name like Hartshorne—a name not unknown in South Wales to-day—in the account books of collieries as far apart as Coalbrookdale in Shropshire and Worsley in Lancashire of itself suggests migration. But there is also evidence of a less inferential character.

In the technique of getting and selling coal Shropshire was in advance of other areas at the opening of the eighteenth century. It was here that the long-wall method was devised and developed. And just as for the iron industry so for the coal industry, the region about Coalbrookdale became a centre of labour dispersion.[5]

[1] "The Remarkable Story and Sudden Death of a Cock-Fighter, Who died on the Pit-hill as he was about to descend into a Coal-pit. Together with a Copy of Verses upon the Occasion by the Famous Poet, William Cowper, Esq.," Religious Tract Society.

[2] G. Eayrs, *op. cit.*, p. 209.

[3] Bell Collection.

[4] Some Account of Mines and the Advantage of them to this Kingdom (1707), 66, British Museum.

[5] Galloway, *Annals of Coal Mining*, p. 20.

Entries in the Griff Coalpit Books indicate that men were being transferred from Shropshire to Warwickshire at an early date :

> " Oct. ye 19th, 1729.
> " Tho. Marler Expences going for men into Shropshire. 8 Men 2*s.* 6*d.* each paid them to bear their charges . £1 "

When the Carron Works were set up near Falkirk in 1760, colliers from Shropshire were introduced into the pits at Kinneil to work by long-wall [1]; and that the method was carried to the Bridgewater Collieries in Lancashire about the same time is shown by an entry in William Brough's Day Book :

> " 1767 May 21 Paid Jas. Gough by Mr. Gilbert more than his Wages when he came out of Shropshire to try to get the 4 foot coal longwork. . . . . £0 18*s.* 0*d.*"

But it was naturally to the neighbouring coal-fields of Staffordshire that most of the emigrants from Shropshire passed ; and a mining commissioner of the nineteenth century, puzzled by terms in use among the miners of Staffordshire, had to seek for explanation in the older mining district of Shropshire.[2]

Almost from the beginning the South Wales coal-field was worked by immigrant labour. As early as 1697 Sir Humphrey Mackworth, after failing in an attempt to work the Gnoll Colliery with local men, travelled into other counties to find skilled miners [3]; and towards the end of the eighteenth century a veritable exodus by road and canal took place from Shropshire and Staffordshire to the coal-field of Glamorgan. From the Newcastle area colliery owners like the Brandlings came to sink pits in Yorkshire, and skilled viewers like John Curr of Sheffield were brought from the same region. The movement of specialised workmen from this field to pits in other parts of the country may be instanced by the following entry in a book of the Bridgewater Colliery :

> " 1778, Sept. 8. By Bar. Tulley and Robr. Hutchinson's exp^e^. from Newcastle-upon-Tyne to Worsley and to and from Worsley and Ellesmere when they went to Cut rods to make Coal Baskets . . . . . £2 7*s.* 3*d.*"

And the number of absconding colliers who found asylum in the pits of Cumberland was so great as to call forth a complaint from the owners of the Tyne and Wear in 1795.

[1] *Trans. Inst. Min. Engineers*, VI. 384.
[2] Mid. Mining Comm., First Rept., xxxiv–xxxv.
[3] Wilkins, *The South Wales Coal Trade*, p. 28.

It is doubtful, however, whether immigrants, other than specialised workers like corvers, often became permanent settlers. There was a strong feeling of hostility to the stranger, and the importation of outside labour was violently resisted by the colliers. About the year 1800, when Lord Dudley attempted to introduce into Staffordshire some thirty colliers from the Tyne, a riot broke out and his collieries were threatened with destruction.[1] And when in 1832, attracted by the opportunity of earning in two days as much as they could earn in a week in the lead mines, sixty "groovers" moved from West Durham to Walbridge, the colliers stopped the engine and threw corves and tubs down the shaft when the groovers were below.[2]

Physical resistance apart, there were good reasons why the flow of labour from one area to another was rarely of appreciable volume. Geological conditions varied widely, and technique more widely still. Even to-day it is said to be easier to train local agricultural labour for the pits of South Yorkshire than to adjust the skill of colliers from other areas. In the eighteenth century the pitman accustomed to pillar-and-stall methods in Durham would have been lost in the long-wall workings of Shropshire. Scottish colliers were afraid of the deep, inflammable pits of the Tyne and Wear. And when English miners were set to work in Scotland, "from the hardness of the coal and other causes, they soon took an opportunity of deserting, so that in a short time a straggler or two only remained behind."[3]

But if there were fences between the colliers of one area and those of another, there were mountainous barriers between colliers as a whole and labour in other occupations. The coal-miners of the eighteenth century formed, indeed, an hereditary caste almost as exclusive as that of the owners of mineral rights. "The customs and habits are so different from the other classes of the labouring poor that a Pitman is ill qualified to pursue any other kind of labour," wrote W. Thomas. "When they do change it is generally from the pit to the deck of a Newcastle collier." On the other hand, there was little influx of outside labour to the coal industry. Although farm labourers in Northumberland and Durham occasionally sent their sons to the pits, it is improbable that the volume of labour so introduced was ever more than a minute fraction of the whole. For the industry was in ill odour.

[1] Edington, *Essay on the Coal Trade* (1803), p. 25.

Report of the Trial of the Pitmen for the Riot at Walbridge Colliery Newcastle local pamphlets.

[3] Bald, pp. 81–82.

It was not only in Scotland that criminals were sentenced to penal servitude in the pits: in 1699 seventeen convicts had their sentences remitted on condition that they bound themselves to work in the mines of Sir Humphrey Mackworth for five years; and about the same time a Secretary of State made the same embarrassed employer the offer of a number of convicted pirates for his coal-pits.[1] Free labour was hardly likely to be attracted by the prospects of such workmates.

But there were more serious obstacles than this. In Scotland and the north of England, in particular, the work of the collier was of so specialised a nature that a long apprenticeship was necessary. "He who is to be a Scotch collier must begin his labour as soon as he is able to creep to the coal-pit," wrote Bald, for only those inured to them from childhood could endure the conditions of work in the Scottish pits. And in Northumberland and Durham it was necessary to ascend by the successive stages of trapper, foal, headsman and half-marrow before one became an authentic pitman. Generally the training was given by the father, who carried his children to work with him from an early age. Advertisements like that of an Alnwick colliery [2] in 1810, "Pitmen wanted that can bring Boys with them to put," are by no means uncommon in the newspapers of the Newcastle district. And that the apprenticing of boys to their own fathers existed in other coal-fields and was encouraged by the employers is instanced by an item in the Cash Book of Dame Dorothy Bradshaigh of Wigan:

> "1 October 1773: By paid Chas. Lowe for training and instructing his son for a Drawer . . . . £1 11*s.* 6*d.*
> Henry Winrow for his son's latter year . . . 10*s.* 6*d.*"

The colliers were notoriously a prolific race, and a few families would sometimes man a whole colliery. At Haigh in 1765 the five pits at work were described as Matthew Lowe's Pitt, Henry Lowe's Pitt, Peter Lowe's Pitt, Thomas Lowe's Pitt and William Lowe's Pitt.[3] And that generation followed generation in work underground is demonstrated by a glance at the records of any colliery concern with a long history. Colonel Blackett informs the writer that his colliery to-day has employees descended from the men who set their marks to an indenture of 1767.

In Wales and the English Midlands the coal-miners conformed

[1] C. W. Wilkins, *The South Wales Coal Trade*, p. 29.
[2] Bell Collection, Vol. VI. p. 80.
[3] Account Book, 1765, Haigh Hall.

less closely than those of Scotland and the north of England to the ideal " non-competing group " of economic theory. For in the pits of these coal-fields labour was less specialised than in the larger and deeper pits of the north. It is known that in 1777 the Kingswood collieries were providing work for unemployed felt-makers from Bristol [1]; and Bald refers to the Irish labourers who entered the coal-works of the west of England.[2] At the end of the Napoleonic wars men displaced from the army, and the unemployed from varied trades, found work in an industry which, in spite of general trade depression, was undergoing phenomenal expansion. A document relating to Poor Law Settlement examinants at Staveley in Derbyshire, made between the years 1822 and 1828, sets forth the industrial careers of forty-seven individuals.[3] Of these, fifteen had worked as colliers at one time or another, but only three stated definitely that they had worked in the pits all their lives. The devastating effects of military service on an industrial career is exemplified by the history of John Nouch. Born in 1793, he had been apprenticed at the age of nine to a framework knitter of Burdon Joyce for seven years, but enlisting a few weeks before his indenture would have expired, he had served for seven years in the army, after which he found employment not in his old trade but as a colliery labourer at Staveley. Similarly, Richard Clay, who was born in 1790 or 1791, had been first hired to a farmer at Barlow, and then at the age of fourteen had become apprentice to his father, a viewer in the colliery at Bolsover. After serving under the indenture for five and a half years he had enlisted in the Royal Artillery, and when he returned after two years' service abroad, he was obliged to take work as an ordinary collier at Staveley, and was ultimately forced to apply for poor relief.

But, for our present purpose, the point of interest is that several of these collier paupers had spent part of their working lives in occupations other than coal-mining: three had served as hired labourers in agriculture, one had been a baker's apprentice, and another described himself as the son of a cordwainer.

Even in Northumberland and Durham an inflow of labour took place during the trade depressions of the 'thirties and 'forties of the nineteenth century. As the industry moved away from the Tyne Valley, northward to the River Blyth and southward to the Wear and the Tees, lead-miners, agricultural labourers

[1] Redford, *Labour Migration in England*, p. 51.
[2] Bald, *op. cit.*, p. 80.
[3] Sheffield Municipal Reference Library, Jackson Coll.

and navvies took to the coalpits. And between 1815 and the middle of the century there occurred a large Irish migration to the coal-fields of Scotland and the west of England, with, it seems likely, some lowering of economic standards.[1] Real wages, it is true, were almost certainly higher in the 'forties than in any but the most prosperous of the war years.[2] But in some other important respects the conditions of mining labour before the beginning of last century strike one as less unpleasant than those revealed in the Reports of the Commissioners of the eighteen-forties. If this impression is well founded, and not a mere illusion of distance; if some deterioration had really taken place, it is not difficult to guess at the causes. Partly it would be due to a passing depression of trade, partly to the greater depth and size of the later coal-mines and the undue pace at which the industry had been expanding. But it is not unlikely that a contributory cause was the influx to the coal-mines of a population that had neither the professional traditions nor the technical skill of the colliers of the eighteenth century.

T. S. ASHTON

[1] Welbourne, *The Miners' Unions*, p. 46. Bremner, *The Industries of Scotland*, p. 20.

[2] Report of Mining Commissioners (1844), Vol. II. p. 37.

A PRE-BANK OF ENGLAND ENGLISH BANKER—EDWARD BACKWELL

It has hitherto been generally assumed that the English goldsmith bankers of the first two decades of the second half of the seventeenth century were very rudimentary exponents of banking technique who came to a disastrous and untimely end in the twelfth year of the post-Restoration epoch. Historians have devoted little attention to their activities, and have usually regarded Charles II's partial suspension of cash payments at the Exchequer of Receipt [1]—the so-called " Stop " of the Exchequer —as an artifice which immediately ruined all these bankers. Such conceptions are primarily due to the complete neglect of that vast field of documentary evidence, the Stuart Records of the Exchequer of Receipt.

In the light, then, of this new evidence, and of other important contemporary manuscript material, there are strong grounds for concluding that the private banking of the goldsmiths was a powerful factor in the economic development of the England of later Stuart times. The " shops " of the wealthiest of the London goldsmiths of the post-Restoration period were really important banking establishments, and in some of these the banker's trade was undoubtedly greater than that of the *aurifaber*. Interest was paid on deposits; loans were supplied; bills of exchange, tallies and various types of Treasury-Exchequer payment orders were discounted; promissory notes, which circulated freely, were issued; cheques were used; bullion was bought and sold; foreign coins were changed; systematic accounts were kept in special ledgers. " Public Banks," wrote that observant contemporary economist Dr. Nicholas Barbon,[2]

[1] The old English Exchequer was divided into the Exchequer of Receipt, the department which was concerned with the actual receipt and payment of public revenue, and the Exchequer of Account or audit department. For contemporary accounts of the Exchequer in the seventeenth century see Sir Thomas Fanshaw, *The Practice of the Exchequer Court and its severall Offices and Officers* (1658); and P.R.O., Records of the Treasury, T 43/6, The Lowndes Papers. See also T. Madox, *The History and Antiquities of the Exchequer* (1769), I., chap. vii; F. S. Thomas, *The Ancient Exchequer of England* (1848); H. Hall, *Antiquities and Curiosities of the Exchequer* (1898), chap. iv; H. Jenkinson, *A Manual of Archive Administration* (1922), pp. 206–19; M. S. Giuseppi, *Guide to the Manuscripts preserved in the Public Record Office* (1923), I., pp. 178–81.

[2] *A Discourse of Trade* (1690), pp. 28–29.

" are of so great a Concern in Trade that the Merchants of London for want of such a Bank have been forced to carry their Cash to Goldsmiths, and have thereby raised such a credit upon Goldsmiths' Notes that they pass in Payments from one to another like Notes upon the Bank." " Some ingenious goldsmith," declares Mr. Hartley Withers,[1] " conceived the epoch-making notion of giving notes, not only to those who had deposited metal, but to those who came to borrow it, and so founded modern banking."

There is, in fact, an embarrassing wealth of contemporary manuscript evidence which proves that the goldsmith bankers were widely recognised keepers of deposits, patronised by many thousands of provincial and metropolitan customers; powerful bullion merchants; big dealers in both " inland " and " outland " bills of exchange, and in Treasury-Exchequer payment orders; and important " accomptants," " cashiers," " receivers " and " farmers " of the public revenue. Some even ran their businesses in the form of partnerships; some had acquired an international reputation; while at least two anticipated one of the modern functions of the Bank of England by acting as bankers to the other goldsmith bankers. " The Goldsmiths in Lumbardstreete," wrote a shrewd " working " London goldsmith in the year of the " happy " Restoration,[2] " . . . are just in the nature of Bankers at Amsterdam, . . . keeping at this day many great Merchants of London cashes."

Nor were the goldsmith bankers all immediately ruined by the " Stop " of the Exchequer. There is documentary evidence to show that some of them received not only payments of interest on their loans to the King, but also repayments of such loans shortly after the " Stop " was declared. Only five bankruptcies are known to have occurred among those who financed the Government. Sir Robert Viner, who suffered most, managed to carry on his business for twelve years after the " Stop," for it was not until 1684 that he became bankrupt. Lindsay collapsed in 1679, Backwell in 1682, Rowe in 1683, and the " shop " of Price in 1715. Moreover, it must not be forgotten that there were a number of goldsmith bankers like the Hoares, the Childs, the Pinckneys, the Heriots, the Stokeses, the Kentons, the Mawsons and the Williamses[3] who were not directly affected by the " Stop,"

[1] *The Meaning of Money* (1916 ed.), p. 24.

[2] T. Violet, *An Appeal to Cæsar* (1660), p. 22.

[3] Details about these will be found in Sir Richard C. Hoare, *Pedigrees and Memories* (1819), pp. 19–20; A. Suter, *Worthies of St. Dunstan* (1856), pp. 30–31; T. C. Noble, *Memorials o Temple Bar* (1869), chap. vi; F. G. Hilton Price,

while new goldsmith bankers emerged, such as the powerful combination of Duncombe and Kent,[1] which was advancing large sums to Charles not long after the "Stop." Kent, for instance, was financing the army in 1674 and 1675,[2] and in 1676 he announced that he was prepared to advance money up to £50,000, at 6 per cent. interest plus 2 per cent. gratuity, for the service of the "land forces." [3]

Of the group of bankers which advanced large sums to the Exchequer, Sir Robert Viner "and partners," Alderman Edward Backwell, Francis (afterwards Isaac) Meynell "and partners,"[4] and Gilbert Whitehall were, in the order named, easily the most powerful. Evidence of the remarkable nature of the transactions of the members of this group is contained in five important classes of contemporary documents:

1. Certain surviving personal ledgers and account books.
2. The Records of the Exchequer of Receipt.
3. The Records of the Treasury.[5]
4. The Early Records of Chancery Proceedings.
5. The Exchequer Bills and Answers (London and Middlesex).

Most of the evidence is in the first three groups; the fourth and fifth groups contain a number of records of cases appertaining to some of the goldsmith bankers and their customers.

Unfortunately, however, not one of the personal ledgers of

Handbook of London Bankers (1876), *passim*; F. G. Hilton Price, "Some Notes on the Early Goldsmiths and Bankers," *Trans. of London and Middlesex Archæological Society*, V. (1881); C. M. Collins, *The History, Law, and Practice of Banking* (1882), chap. iv; W. Chaffers, *Gilda Aurifabrorum* (1885), pp. 60–84; W. Howarth, *Some Olde Curiosities* (1890), chaps. v and vii; A. F. Baker, *Banks and Banking* (1896), pp. 4–5; B. B. Turner, *Chronicles of the Bank of England* (1897), chap. i; W. G. Bell, *Fleet Street in Seven Centuries* (1912), chap. xxii.

[1] The names of Duncombe and Kent appear in the list of goldsmiths keeping "running cashes" in 1677 printed in *The Little London Directory* of that date. See F. G. H. Price, *Handbook*, etc., pp. 158–9.

For Duncombe's career see *D. N. B.* See also J. T. Thorold Rogers, *The First Nine Years of the Bank of England* (1887), preface, pp. xi–xii, and Macaulay, *History of England* (1858–61 ed.), IV. p. 628.

[2] B. Mus., Addit. MS., 28,078, fol. 298.

[3] *Ibid.*, fol. 284.

[4] Pepys, *Diary*, 18th September, 1662, refers to Francis Meynell, who was an alderman and sheriff of London, as "the great money-man." He died in 1666.

[5] The numerous transactions of the goldsmith bankers as recorded in these records may be traced in Dr. Shaw's monumental *Calendar of Treasury Books*. The affairs of the group that was involved in the "Stop" will be found in Vols. I, II, III, IV. For Duncombe and Kent see Vols. VI, VII, VIII.

Viner, Meynell or Whitehall has survived. Therefore, despite the fact that their affairs are examined in great detail in various books in the second of the preceding groups of records, anything approaching a complete survey of their financial transactions is not possible. But several of Backwell's ledgers are still extant,[1] are in an excellent state of preservation, and, as will be shown a little later, are valuable not only on account of the detailed information which they give about the business of this banker but also because they contain a great deal of material appertaining to the financial activities of most of the other important bankers of the day.

Indeed, Backwell's ledgers appear to be the only surviving original account books of a member of this powerful group of bankers which financed Charles II in the early years of the post-Restoration period, the group which was directly concerned in the "Stop," and without whose assistance the second Dutch War (1665–67) could not have been waged. In addition, the affairs of Backwell are examined with meticulous care in certain important books among the Records of the Exchequer of Receipt; the various Treasury Books contain numerous details of his transactions; and there are several references to his business among the Chancery Proceedings and the Exchequer Bills and Answers. Thus the surviving documentary evidence with reference to this important banker is much more complete than that relating to the other bankers.

For this reason Alderman Edward Backwell,[2] "The Unicorn," Lombard Street, banker to the Commonwealth of England, Charles II, Prince Rupert, the Duke of York, the Earl of Clarendon and the East India Company, to name but a few of his important customers, has been selected as the subject of this article. "To Alderman Backwell's," wrote Mr. Pepys on 5th June, 1662, "to see some thousands of my Lord's crusados weighed, and we find that 3,000 comes to about £530 or £540 generally." "The King and the kingdom must as good as fall with that man at this time," the famous diarist was told, "as a great secret," three years later, by Sir George Carteret, the Treasurer of the Navy, while discussing the possible effects of a "run" on the "shop" of Backwell during the banker's temporary absence "abroad upon some private

[1] In possession of Messrs. Child (Messrs. Glyn, Mills & Co.). Immortalised by Dickens as Telson's in *The Tale of Two Cities*, this historic bank became part of the Glyn, Mills amalgamation in 1923. Backwell's grandson, Tyringham, married Elizabeth, the daughter of Sir Francis Child (1642–1713), and their sons William and Barnaby became partners in the banking house of Child.

[2] For details of his career see *D. N. B.*

score with a great sum of money." [1] "Edward Backwell, alderman of London," remarks Granger,[2] "was a banker of great ability, industry and integrity; and, what was a consequence of his merit, of very extensive credit." The account of Backwell's banking business which follows is based entirely upon an examination of a number of important documents selected from the preceding groups of contemporary manuscript sources.

Backwell's surviving ledgers cover eight important years (1663–71) of the post-Restoration period, years which include such critical events as the Great Plague, the Great Fire, and the second Dutch War. These books are remarkable evidence of the commercial and financial activities of wealthy contemporary merchants, and of the rapidly expanding bill market of Carolean London. They contain countless illustrations of the business transactions of hundreds of traders, among which are interesting details of the affairs of certain Jewish merchants who were conspicuous figures in the international trade of the second half of the seventeenth century.[3] Striking features are two series of special accounts entitled "Exch[a] Acct," and "Interest alias Discount Acct," occurring at frequent intervals, and made up of items collected from the various personal accounts of customers. The large number of entries in the "Exchange Accounts" prove that dealings in bills of exchange formed an important part of Backwell's business. Many of his customers' accounts relate largely to dealings of this nature, and there are even instances of such accounts relating entirely to bills of exchange.[4]

The various types of entries in these ledgers reveal the exact nature of Backwell's transactions. On the debit side, for example, of the two earliest ledgers the following constantly appear: "to him," "to order," "to him in part," "to interest," "paid in full for interest"; and on the credit side: "by money," "by money at consideration," "by money at 5 per cent.," "by him,"

[1] *Diary*, 6th July, 1665.

[2] *Biographical History of England* (1824), V. p. 185.

[3] *E.g.* Ferdinando Mendez da Costa has four separate accounts in the ledger dated 1664, which contains details of big transactions, and numerous items relating to bills of exchange and the import of bullion.

Other important Jewish commercial accounts which occur in these ledgers are those of John da Costa, Affonzo Mendez, Isaac Alvarez, Henricus Alvarez, and Affonzo Rodriguez.

Such items as: "By fine silver 675 lb. 5 ozs. at 65*s.* 6*d.*——£2,212 4*s.* 3*d.*" frequently occur in these accounts.

[4] There are many hundreds of entries in Backwell's ledgers in the individual accounts of his customers of the following type: "By bill drawn at sight paya. to Mr. G. Horton value of Mr. Bulstrode——£100."

" by note," " by my note," " by your bill given me ye 15th April for Antwerp," " by money at 3d. per diem at a weekes warning," " by money at interest," " by money paya. at demand," " by bill drawn on him at 5 da. sight payable Mr. X value of Y," " by so much you remitted me on Mr. Z," " by note payable at demand," " by fine bars," " by tallies." The later ledgers also contain a very large number of entries of the following type which are evidence of big dealings in Government money orders : " by an order," " by an order on the Customs," " by an order on December 1670 £2,000 p. Squibb," " by an order on March 167$\frac{0}{1}$ £2,000 p. Gregory." [1] It is quite clear from these selected examples that notice was sometimes required before the depositor could withdraw his money, or, in other words, that a distinction was made between what are now termed current and deposit accounts.

In addition to some hundreds of the personal accounts of prominent English and foreign merchants [2] of the day, Backwell's ledgers contain a large number of other important accounts which are further evidence of the part played by this powerful banker in the development of England's home and overseas trade, and which show that he was not only constantly advancing money to,[3] and discounting the bills of, traders but was also frequently investing in trading enterprises [4] and acting as the banker of many well-known trading companies. A few instances of these latter types are the accounts headed : " The Owners of y^{e} Ship Eagle," " Adventures in y^{e} Royal Company," " The Muscovia Comp^{a}," " The Hamborough Comp^{a}," " The Glassiers Comp^{a} and Wardens," " Sir Thomas Russell and Comp^{a}," " Sir William Rider and Comp^{a}," " The Ironmongers Comp^{a}," " The Goldsmiths Comp^{a}, Wardens and Commonalty," and, most important of all, " The East India Company."

Some of these company accounts contain numerous examples of big financial transactions. In the ledger dated 1670–71, for example, there are several accounts of the East India Company,[5]

[1] Squibb and Gregory were Tellers of the Exchequer of Receipt.

[2] Among the well-known City merchants of the day who kept their accounts at Backwell's were Michael Godfrey (afterwards Deputy Governor of the Bank of England), Sir Richard Ford, Sir Hugh Myddleton, Thomas Papillon and Peter Vandeputt.

[3] *E.g.* in the ledger dated 1663, fol. 479, " The Owners of the Ship Marchant Delight," " To them lent—£450 "; *ibid.*, fol. 392, " Samson Allen & Compa," " By money at consideration 5 p.c. repay @ Feb. 1663——£250."

[4] *E.g.* ledger dated 1664, fol. 669, " By the shippe Royal Katherine for my owne 32 part of her stock——£37 10*s.* 0*d.*

[5] *E.g.* fols. 82–83, 260, 401, 423, 485, 568, 570.

the first of which,[1] appertaining to April 1670, has a total on the debit side of £27,190 2*s.* 6*d.*, and on the credit side of £43,115 0*s.* 6*d.*, many of the items relating to the subscriptions of City merchants, and of prominent goldsmith bankers. This particular ledger shows that the receipts of the East India Company for the year ending 25th March, 1671, amounted to £237,900.

But Londoners and London companies form only a section of Backwell's numerous customers. The ledgers show that he possessed many hundreds of provincial depositors, that he functioned as a private banker to Charles II,[2] and also as a State banker duly authorised to receive and make payments on behalf of the Exchequer, and that his transactions as banker to the other goldsmith bankers were on a very large scale. The last feature is overwhelming evidence of the important financial position occupied by, and of the great resources of, the bank of Backwell, which was undoubtedly both the central or reserve bank and the clearing house of the post-Restoration period. It was the indispensable precursor of the Bank of England, a precursor which was of paramount importance in this outstanding era of English economic expansion.

Backwell's provincial customers came from all parts of England; he kept their deposits of money and of plate, and discounted their bills, both "inland" and "outland." Devonians and Novocastrians, Oxonians and East Anglians, men of Kent and of Somerset all patronised this famous banker. Merchants of Newcastle engaged in the coastwise coal trade drew "inland" bills on London merchants which were discounted at Backwell's; West Country clothiers and a Cambridge College[3] kept their surplus cash at "The Unicorn." There are many accounts in the ledgers which show that as the banker of the farmers of the Customs, Backwell frequently made direct payments out of the Customs revenue on behalf of the Exchequer of Receipt.[4] Some of his big advances to the Exchequer on the security of certain revenues are dealt with in special accounts under such headings as: "Exchequer Loan on ye Crown Lands," "Exchequer Loan on ye Fee Farms," "Exchequer Loan on Wines"; and

[1] Fols. 82–83.

[2] *E.g.* in the ledger dated 1664, folio 432, is headed "The King's Most Excellent Majesty Ac."

[3] One of the accounts of the "Masters and Wardens" of Trinity College, Cambridge, appears in the ledger dated 1664 (fol. 662).

[4] In the ledger dated 1664, "The Farmers of the Customs" account, fol. 199, the entries on the Dr. side show that Backwell made direct payments out of the Customs receipts; *e.g.* 5th May, 1664, "To Capt. Rainford for ye Tower Garrison ——£361 4*s.* 0*d.*"

in these are recorded payments of interest, or of repayments of part of the principal, received from the Exchequer officials. Among the other bankers of the day who kept accounts with Backwell were: "Alderman Francis Meynell [afterwards Isaac Meynell] and partners"; John Colvile; Robert Welstead; Humphrey Stokes [1]; "Sir Thomas Viner [afterwards Sir Robert Viner] and partners"; Jeremiah Snow, the first of the banking Snows; George Snell; John Lindsay; "Mr. [Benjamin] Hinton and Comp[a]"; Joseph Hornby, Thomas Rowe and Thomas Kirwood. These accounts are evidence of the big banking businesses of his banker customers.[1] They contain hundreds of such entries as: "by him," "by cash," "by money," "by note," "by several notes," "by my note," "by Sir Robert Viner," "by Mr. Snell," "to Mr. Rowe," "to Mr. Colvile," "to Mr. Snow," "to Mr. Stokes." [2]

Like the other goldsmith bankers, Backwell was, of course, a big pawnbroker, therefore it is not surprising to find in these ledgers many special pawn accounts. Another striking feature is a series of valuable farm accounts appertaining to his country estates, which contain some remarkable details relating to English agriculture in the latter half of the seventeenth century. In the ledger dated 1669 one of these, headed "Creslow Acc[t]," [3] gives interesting information about the wages of farm labourers; the market price of oxen, sheep, hides and seed; ploughing and sowing expenses; the expenses of driving cattle to and from the market; household expenses, and the wages of mowers and of haymakers.

The account books just discussed are known as ledgers I. J, K, L, M, N, O, P, Q, R, S. The series is not complete, for there are in Ledger I references to a preceding Ledger known as H; and it seems very probable that there was originally a Ledger A. Therefore as far as the surviving books of this particular series are concerned there is no information about Backwell's transactions either in Cromwellian times or during the years immediately

[1] Lloyds Bank is, through Barnett, Hoare & Co., which it absorbed in 1884, indirectly connected with the goldsmith banking business of Humphrey Stokes or Stocks, Pepys' "little goldsmith," who kept "running cash" at "The Black Horse" in Lombard Street in 1677. This explains the modern Lloyds Bank crest—a black horse and the date 1677.

[2] The following totals on the credit side of the accounts of some of the most prominent of the other bankers all appear in the ledger dated 1664: Sir Thomas Viner & Co., £50,561 9*s*. 11*d*.; John Colvile, £15,835 6*s*.; Jeremiah Snow, £20,704 14*s*. 3*d*.; George Snell, £14,208 18*s*.; John Lindsay, £15,659 2*s*. 8*d*.; Benjamin Hinton & Co., £34,159 8*s*. 10*d*. A large number of these accounts appear in the various other ledgers.

[3] The Creslow estate was situated near Aylesbury, Buckinghamshire.

following the "Stop." Fortunately, however, another of Backwell's books still survives, and is in an excellent state of preservation. This appears to be a rough account book, which, though commenced in 1657, apparently for the purpose of recording Backwell's big advances towards the maintenance of the English garrison at Dunkirk, was not finished until 1678.[1] It is, therefore, particularly valuable for two reasons: it proves that Backwell conducted a big banking business in Cromwellian times; and it contains new evidence with reference to his transactions after the "Stop" of the Exchequer.

On the cover of this important book is written, "Copies of Dunkirke Affair," and for this reason it is known as "The Dunkirk Ledger." But it was used for a double purpose. One section contains copies of the Privy Seals, warrants, certificates, and payment orders relating chiefly to the Dunkirk transactions. The other section is devoted to what appear to be rough copies of the accounts of customers, and these usually appertain to the three years immediately preceding the Restoration.

Among the accounts in the latter section the most important is headed, "The Commonwealth of England," and this shows that between 1st August, 1658, and 7th March, 1659, the "moneys transmitted to the Governor of Dunkirk" by Backwell amounted to £65,260. Two interesting facts emerge from the credit side of this account: (1) £54,889 11*s.* 3*d.* of this loan was quickly repaid by the Exchequer in a number of instalments; (2) the instalments were paid both in cash and in plate,[2] Backwell crediting the Government with the market price of the metallic content of the latter. This section also contains two curious accounts: a plate account entitled "His Highness Richard, Lord Protector," an item in which refers to a "loane of plate to entertaine the French Ambassador"; and a mercantile account headed, "The Owners of the Ship Katherine," showing both principal and interest columns.[3]

[1] Backwell and Sir John Shaw functioned as Paymasters to the garrison of Dunkirk between 1661 and 1667. For details of their transactions see *Calendar of Treasury Books*, I and II, *passim*.

They were also "Treasurers and Paymasters of the forces in Flanders" in 1662–3. See *ibid.*, I. pp. 411, 432, 441, 498.

[2] *E.g.* "Rec[d] of the Committee of Parliament by old Plate——1529*l.* 11*s.* 3*d.*"

[3] One of the three surviving Cromwellian Receipt Books of the Exchequer of Receipt, P.R.O., Recs. Ex. R., E 401/1931, dated 30th September, 1656, to 28th September, 1658, is important evidence of Backwell's activities in Cromwellian times. It contains records of twenty payments made to the Exchequer of Receipt by Sir Thomas Viner and Backwell in partnership. These payments, varying from £1,000 to £10,000, and amounting to a total of £95,400 4*s.* 7*d.*, are thus recorded:

The other section of the Dunkirk Ledger, though chiefly relating to "the Dunkirke affair," contains many valuable and interesting entries illustrative of the big dealings of Backwell. The first is a copy of "a certificate of all such sumes of money as have been paid at ye Receipt of the Publique Exchequer unto Edward Backwell Esq." These particular sums, which amounted to £43,067 5*s.* 4*d.*, were paid up to 7th May, 1660, "in satisfaction of moneys transmitted" by Backwell for the use of the garrison at Dunkirk. Other interesting items in this section are: (1) a copy of a Privy Seal to Backwell granted by Richard Cromwell, dated 20th September, 1658, and authorising payment of £350 for a jewel supplied to Oliver Cromwell; (2) a copy of a Privy Seal authorising repayment of a loan of £3,230 which Backwell "sent to Dunkirke for ye Protector"; (3) a copy of an order of Lord Treasurer Southampton, dated 6th December, 1662, for the delivery of a number of "Dunkirke chests" [1] to Backwell as

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"p. Sir Thomas Viner and Edw. Backwell cittizen and goldsmith of London in part of the Moneys payable by them upon their contract for the Spanish plate and money lately brought by generall Montague——2,000*l.*

In the contract between these partners and the Council of State it was arranged that the whole of the Spanish prize-money was to be brought to Portsmouth by Montague, and conveyed in waggons to London to be coined at the Mint under the direction of Sir Thomas and Backwell, who for this privilege agreed to advance £50,000 to the Government between 31st October and 16th November, 1656. S. P. Dom., Interregnum, Council of State, I 77, fols. 462–5.

Another of these Cromwellian Receipt Books, E 401/1930, dated Michaelmas 1654 to 27th September, 1656, shows that Backwell himself was, earlier in 1656, engaged in transactions of a similar nature. On 9th August, for example, he paid into the Exchequer of Receipt the sums of £6,000, £5,400 and £6,000 "in part of twenty thousand ffoure hundred pounds for a certaine quantity of the coine of Mexico . . . lately brought from Portugal." The importance of this transaction is shown by the fact that these were the only Exchequer receipts on this particular day.

[1] Backwell, on behalf of Charles II, had acted as receiver of the money of the sale of Dunkirk. See *Cal. Treas. Books*, I, *passim*.

A copy of a warrant issued by Lord Treasurer Southampton on 15th October, 1664, for the drawing of "several orders of payment for the several sums of 8,000 li. and 1,500 li.," which is recorded in P.R.O., Recs. Ex. R., Warrant Books (Auditor's), E 403/3032, fol. 12, is of peculiar interest. The orders were issued to Backwell. Those amounting to £8,000 were the "reward" on a loan of £286,042 "for several occasions of His Ma^ties Navy and Guards for which he received the ordinary consideration of six pound p. centum His Ma^tie being sensible that the said Edward Backwell . . . was forced to admit larger pporcons of other mens monies in Banck (which he payes interest for) than otherwise he would doe which puts him upon greater uncertainties than others who deale in common loanes where a precise day of payment is fixed." Those amounting to £1,500 were an "allowance" to Backwell for his services in connection with the Dunkirk money. "And whereas," continues the warrant, "the said Edward Backwell did by His Ma^ties comands transport himself and his servants unto ffraunce to count and receive ye sume of ffoure Millions and five hundred thousand livres agreed to be paid to his Ma^tie by the ffrench king upon the rendring of

security for a sum of £20,000 advanced to the Treasurer of the Navy; (4) a copy of a "Privy Seale for £8,000," dated 14th September, 1667, granted to Backwell "in consideration of interest" for the sum of £286,042 advanced on various occasions for the use of the navy, the army, the Household, and "other extraordinary expenses"; (5) a copy of a Privy Seal, dated 18th April, 1664, authorising payment of £13,363 12*s.* 11*d.* as interest on money advanced by Sir John Shaw and Backwell "joyntly and severally"; (6) a copy of a warrant from "His Ma^ties Comm^rs for ye affaires of Tangier," authorising their Treasurer, Mr. Samuel Pepys, to deliver to Backwell "in tallyes, orders, or assignments the summe of ten thousand pounds sterling . . . and also satisfieing him ye usuall interest allowed," in consideration of a loan of £10,000 to the Governor of Tangier, which was delivered to the said Governor in "fortie foure thousand foure hundred fortie four pieces of eight and a halfe being computed at foure shillings sixe pence each"; (7) a copy of a "Privy Seale for £6,657 16*s.* 4*d.*," dated 30th March, 1668, interest on a loan of £128,896 19*s.* 3*d.*; (8) a copy of a very important letter of attorney, dated 6th April, 1674, from Charles II to Backwell, in which the latter is appointed the King's special financial agent in the Low Countries.[1]

The preceding letter of attorney is striking proof of the financial activities of Backwell after the "Stop" of the Exchequer. "Whereas," it states, "we have found it necessary to employ a fitt person to our good friends and allyes the States Generall of ye United Provinces for receiving the sume of two hundred thousand pattacoones being the first fourth part of eight hundred thousand pattacoones covenanted and agreed to be paid unto us according to the tenth article of the treaty concluded between us and the said States General on $\frac{9}{19}$ February last past [$167\frac{3}{4}$] . . . Edward Backwell is herewith appointed our true and lawful attorney and procurator for us in our name to demand of the said States Generall and for our use to receive the said sume of 200,000 pattacoones. . . ."[2]

But this letter is not the only evidence of Backwell's operations

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Dunkirk his Ma^tie for the great pains and charge in that service and likewise in respect of ye hazard in securing it against all false counting hath determined to make him an allowance in grosse of the sume of 1,500 li."

[1] All these eight items are contained in fols. 1–65.

[2] The Dunkirk Ledger, fol. 64*b*. Fol. 70 contains a copy of a second letter of attorney authorising Backwell to receive on behalf of the King the remaining 600,000 pattacoones, "wee being well satisfied with the integrity and great discretion of the said Edward Backwell."

after the " Stop " which the second part of the Dunkirk Ledger contains. There are, for instance, a number of copies of Treasury payment orders belonging to this period, and one of these, for £3,401 4*s*. 2*d*., representing interest and gratuity (6 per cent. plus 4 per cent.) " for moneys advanced to His Ma^ties^ service," was actually issued to Backwell on 6th February, 1672, five weeks after the " Stop." [1] Later copies of payment orders of this type, together with the second of two accounts headed, " The Kings most Excellent Ma^ties^ Dr," show that Backwell made several loans to the King between the " Stop " and 1677 when Charles commenced the regular payment of interest on the total debt due to the bankers.

Such are the salient features of the surviving ledgers. They are overwhelming proof of the large resources of a leading Cromwellian and post-Restoration banker. But the details of Backwell's affairs recorded in the second group of contemporary documents, the Records of the Exchequer of Receipt, are even more remarkable. A great deal of extraordinary material relating to the Exchequer transactions of the goldsmith bankers involved in the " Stop " is contained in these valuable records. Much of this material appertains to the King's debt to these bankers, which, according to a special report presented by Danby to the King in Council on 8th February, 1677, amounted to £1,365,733 9*s*. 7¾*d*., and carried an annual interest at 6 per cent., of £81,944 0*s*. 2*d*.[2] Of this total, £295,944 16*s*. 6*d*., with an annual interest of £17,759 13*s*. 9*d*., was due to Backwell.[3]

Careful analyses of this enormous debt are entered in two Exchequer books known as The Bankers Booke of Interest,[4] and A Booke for entringe the Accompts of Goldsmiths and others,[5] important records which hitherto appear to have escaped the notice of historians. " It would," writes Dr. Shaw, referring to Charles II's debts to individual bankers, in one of his lucid introductions to the *Calendar of Treasury Books*,[6] " be of the highest value to the historian if they could be analysed." [7] " The

[1] The Dunkirk Ledger, fol. 64.

[2] *Cal. Treas. Books*, V. pp. 542–6.

[3] P.R.O., Recs. Ex. R., E 403/2510. See also *Cal. Treas. Books*, V. pp. 597–600.

[4] P.R.O., Recs. Ex. R., E 403/3019.

[5] *Ibid.*, E 407/33–34, in two parts.

[6] Vol. III. pp. xlix–l.

[7] Dr. Shaw states, *ibid.*, p. l, that he has discovered two accounts relating to these individual debts, those of John Lindsay, printed in *ibid.*, III. pp. 1335–6 from B. Mus., Addit. MS., 28,074; and Jeremiah Snow's printed in *ibid.*, III., intro. p. l. Lindsay's he regards as valueless for the " purpose of the statement of the banker's debt in Jan. 1672 "; while Snow's, which he terms " the only

most interesting of all," he adds, "if it could be recovered or reconstructed, would be that of Alderman Backwell; such reconstruction is, however, hardly to be hoped for."

The account, or rather the accounts, of Alderman Backwell, and of all the other bankers who advanced money to the Exchequer, with the single exception of Gilbert Whitehall, are contained in these valuable Exchequer books. Commenced two years after the "Stop," they fill the breach which Dr. Shaw laments, and are striking documentary evidence of the care and labour expended by the officials of the Exchequer of Receipt in the collation and tabulation of the big transactions of the goldsmith bankers with the Government. They reveal not only the extensive nature of Charles II's issue of fiduciary paper money, but also the various branches of the public revenue, such as the Excise, the Customs, and the Hearth-money, upon the security of which the large advances were obtained from the bankers.

These Exchequer accounts are presented in three ways: in the form of a number of statements with great wealth of detail; more concisely in tabulated form; or just a simple statement of the total of the debt and of the interest due. There are many examples drawn out in each of the preceding ways, and the debts to the bankers which are analysed are those of Sir Robert Viner, Backwell, Isaac Meynell, John Portman, Joseph Hornby, Jeremiah Snow, Bernard Turner, Robert Welstead, Thomas Rowe, Robert Ryves, George Snell, Isaac Collier, Thomas Pardoe, and Dorothea Colvile, the executrix of John Colvile.

The transactions of Backwell are examined in great detail.[1] Here will be found much interesting information about loans on the security of tallies, on tallies and repayment orders or "orders of loan," and on fiduciary "orders of the Exchequer" registered upon the Customs, the Country Excise, the Additional Excise, Wines and Vinegars, and the Exchequer in general. No clearer evidence of the nature and extent of the post-Restoration monetary artifices could be wished for. There are significant entries relating to important transactions in foreign exchange, and Mr. Pepys as Treasurer of Tangier, figures prominently as an agent in the circulation of fiduciary orders.

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other discoverable account," simply gives the amounts of four separate loans, the names of the borrowers, and the total, an account which is also valueless, because it contains no details about the nature of the relations between the banker and the Exchequer with reference to securities, interest, gratuity and the dates when the advances were made.

[1] Three of Backwell's accounts appear in P.R.O., E 403/3019, fols. 58–68, 151–68, 245–7; and three in P.R.O., E 407/33–4, fols. 21–6*b*, 41*a*–55, 35–8; the econd of the latter group being a duplicate of the second account in the former.

Backwell's loans to the King are analysed in the Bankers Booke of Interest in three sections, and duplicates of these appear in the Booke for entringe the Accompts of Goldsmiths and others. These accounts were prepared by the Exchequer officials because Charles had, under Letters Patent dated 23rd July, 1674, granted the sum of £140,000 as two years' interest on the total debt to the bankers,[1] a sum which was duly paid after a partial statement of the debt had been prepared by the Exchequer. But the loans of Backwell and of Viner were on such a large scale that detailed examinations were not ready for presentation until 1677, when Charles commenced the regular payment of interest. This, and not the "callousness" of Charles, is the reason why the regular payment of interest on the bankers' debt was not commenced until five years after the "Stop." The King honourably discharged his obligations in this respect until his death in 1685.

In these books, therefore, though all the loans and the total interest due to Backwell are examined, the amount investigated up to 21st April, 1675, was £229,845 4*s*.[2] This was divided into £43,599 16*s*. 9*d*., "principal debt" due to Backwell on 1st July, 1674, upon "orders of loane at the Exchequer," and £186,245 7*s*. 8*d*. the "remainder of principal debt" owing to him on 1st January, 1674, secured by "tallies and other orders of the Exchequer." The detailed statement of this particular debt of £229.845 4*s*. is signed by Richard Aldworth, and is preceded by a copy of Danby's warrant for the payment of interest, dated 23rd April, 1675, stating that £4,525 7*s*. 4*d*. had already been paid as interest on the first part of the debt, and authorising the payment of £20,725 9*s*. 7*d*. (out of the £140,000 granted by the King) on the second part.[3] The details of the third part of the debt, referring to two loans of £1,000 and £10,663 4*s*. 9*d*.,[4] were not presented by the Exchequer officials until 22nd March, 1677. In the meantime interest, "reckoned and made principal every six months," on all Backwell's advances had been accumulating, and this explains how the total stood at £295,944 16*s*. 6*d*. when Danby presented his report on the bankers' debt to the King in Council.

[1] P.R.O., Records of the Treasury, Miscellanea, T 52/4, fols. 40–41. See also *Cal. Treas. Books*, IV. p. 540.

[2] P.R.O., Recs. Ex. R., E 407/33, fols. 41*a*–55; and E 403/3019, fols. 151–60.

[3] The total interest on the second part of the King's debt to Backwell amounted to £23,072 8*s*. 8*d*., but of this sum £2,346 19*s*. 0*d*. was deducted, "the same being already allowed and paid to the said Edward Backwell by bonds entered into by merchants for payment of the duty due from them upon the New Imposts and additional duty on Wine and Vinegar." P.R.O., *ibid.*, E 407/33, fol. 42.

[4] P.R.O., *ibid.*, E 407/34, fols. 37*b*–38.

Space will not allow a detailed examination of Backwell's loans to the Government. A few selected examples, however, will show how they were recorded by the Exchequer officials, the nature of the securities, and the amounts advanced.

The first account relating to Backwell in the Bankers Booke of Interest deals with a total of £43,599 16*s.* 9*d.*[1] It was certified correct by Sir Robert Howard on 25th November, 1674, and shows that large instalments of this loan were advanced on the security of the Customs, Wines and Vinegars, and the Country Excise. Made up to 25th June, 1674, it is of the tabulated variety, and is headed thus: "An Accompt of Monies due to Edward Backwell Esq. for Interest after the rate of six pounds p. cent p. annum (making the interest principal every six months) upon orders of loane registered upon severall Branches of his Ma^ties^ Revenue according to the direction of his Ma^ties^ Lres Patents under the Greate Seale of England bearing date the 23rd day of July in the 26th year of his Ma^ties^ reign." The following excerpt relating to a loan of £12,000 upon the security of the Customs illustrates this form of presentation and the official method of calculating the interest:

On the Customs.

li.	*s.*	*d.*		*li.*	*s.*	*d.*
12,000	00	00	Upon an order No. 397 on the Customs in general from 25 Dec. 1672 to 25 Jan. 1673, being 6 months	360	00	00
360	00	00				
12,360	00	00	from 25 June 1673 to 25 Dec. 1673, being 6 months	370	16	00
370	00	00				
12,730	00	00	from 25 Dec. 1673 to 25 June 1674, being 6 months	381	18	05
				1,112	14	05

The order referred to in the preceding entry was a repayment order or "order of loan." This and a wooden tally were given to the lender as receipts,[2] the security in this case being the Customs. The "order of loan" must be carefully distinguished from the fiduciary "order of the Exchequer," which when first

[1] P.R.O., Recs. Ex. R., E 403/3019, fols. 58–68; also in *ibid.*, E 407/33, fols. 21–6*b*.

[2] Prior to 1665 the tally alone was given as a receipt. By 12 Chas. II. c. 9 (1660) the tally was authorised to bear interest, and by 17 Chas. II. c. 1 (1665) the repayment order was introduced to accompany the tally. The latter Act also made the repayment order assignable by indorsement.

issued did not represent any metallic money paid into the Exchequer. The fiduciary orders were either issued as payments for commodities or services to Government creditors, who in turn discounted them with the bankers, or to Departmental Treasurers, who, upon their security, obtained at high rates of interest advances from the bankers, usually of less amount than the nominal value of the orders.[1]

Such loans on fiduciary orders are not recorded by the Exchequer officials in the tabulated form used in connection with the " orders of loan." They invariably appear in these account books in the form of long statements containing full details about each order. There are excellent examples of these detailed statements in the second of the accounts dealing with the loans of Backwell recorded in the Bankers Booke of Interest.[2] A large part of the total given in this account (£195,745 7*s*. 8*d*., afterwards reduced by repayments to £186,245 7*s*. 8*d*.) was advanced to various Departmental Treasurers on the security of fiduciary orders. During 1671, for instance, the Treasurers of the Navy received from Backwell £27,800 on 21 " orders of the Exchequer purporting 30,300 li. for the repayment of the said £27.800 out of the Customs upon the quarter ending Lady Day 1672," while Mr. Pepys as Treasurer of Tangier got £8,000 on four £2,000 " orders of the Exchequer registered on the Law Bill," and £9,000 on nine £1,000 similar orders " registered upon the 4th Quarter of the Subsidy." [3]

This account is remarkable testimony of the careful way in which the big debt to the bankers was examined and presented by the officials of the Exchequer of Receipt. The following synopsis is given as an illustration of this particular method of presentation; it deals with a total of £18,700, part of the £27,800 which Backwell advanced to the Treasurers of the Navy in 1671 : [4]

> £18,700 advanced thus : £5,000, 28th October; £1,800, 31st October; £900, 1st November; £1,000, 15th November; £3,500, 28th November; £500, 30th November; £6,000, 12th

[1] For further details about the various types of Treasury-Exchequer orders, and copies of surviving specimens of the " order of loan " and of the fiduciary order, see R. D. Richards, " The Evolution of Paper Money in England," in the *Quarterly Journal of Economics*, XLI., May 1927.

[2] P.R.O., Recs. Ex. R., E 403/3019, fols. 151–60.

[3] *Ibid.*, fol. 156. Other examples from this statement of loans on fiduciary orders are: the Cofferer of the Household, £12,479 14*s*. 3*d*.; the Duke of York, £6,000.

[4] *Ibid.*, fol. 43.

December; " by the hands of Mr Anthony Stephens . . . as the said Mr Stephens hath certified, and as it agrees with his books of Acct, But comparing the same with the said Edward Backwell's books I find the same to agree in every particular save onely the sum of 900 li. which is entered therein as paid out viz. 610 li. the 31st October 1671 in part and the remainder the 7th November following, upon assignment to the said Edward Backwell of 21 orders of the Exchequer viz. 13 orders part thereof numbered 67, 68, 70, 71, 72, 73, 74, 77, 78, 80, 81, 82, dated 20th May 1671 for 13,500 li. charged on the Customes upon the quarter ended Midsummer 1672; seaven more orders in further part thereof viz. one order dated 14th August 1671 numbered 14, and six orders numbered 21, 23, 25, 27, 29, 31, dated the 19th September 1671 for 7,100 li. charged on the Customes upon the quarter ended at Christmas 1672, and one order more in full thereof dated 14th August 1671 for 900 li. charged on the Customes upon the quarter ended at Lady Day 1673 which compleat the said 21 orders importing 21,500 li. the interest and reward thereof was allowed the said Edward Backwell to the 25th December 1671 being the day to which his last account of interest was made up, and the interest on the said 18,700 li. here stated for the said 25th December 1671 to the 25 December 1673 (being the day to which this interest account is made up) the said 18,700 li. being then unpaid as Sir Robert Howard hath certified amounts unto the sum of——

	li.	*s.*	*d.*
	23,469.	19.	01.

Other interesting items in this second account show that Backwell carried out extensive Exchange transactions by means of special " correspondents " overseas. £10,508 11*s.* 6*d.*, for example, of a loan of £16,000 to the Treasurers of the Navy " was paid in Cadiz in peeces of eight to Sir Edward Spragg the 21st of February 1671 by John Mathew, Edward Backwell's correspondent there, and charged on him here by two bills of exchange dated the same day." [1] And so, again, the £17,000, already referred to, advanced to Mr. Pepys upon the security of thirteen " orders of the Exchequer," " was supplyed in peeces of eight att Cadiz for the use of the garrison at Tangier as the said Mr Pepys hath certified." [2]

[1] P.R.O., Recs. Ex. R., E 403/3019, fol. 154.

[2] *Ibid.*, fol. 156.

It is quite clear from the details of Backwell's loans in the Bankers Booke of Interest, and in the Booke for Registring the Accounts of Goldsmiths and others, that advances on " orders of the Exchequer " were almost invariably for less than the orders " purported " ; that loans were often paid in instalments over " severall days " ; that the securities were usually the Customs, the London Excise, the Country Excise, and the Wines and Vinegars; that both the " orders of loan " and the " orders of the Exchequer " were often issued on the security of public revenue due twelve months after the date of their issue; that Backwell held a large number of both types of orders that had been assigned to him either by the original holders or by intermediate assignees; that he usually received 6 per cent. interest plus 4 per cent. gratuity on his loans to the Government; and that he received part payments of loans and of interest shortly after the " Stop," [1] and before Charles granted in 1674 the payment of £140,000 as two years' interest on the total debt to the bankers.

But these valuable account books do not exhaust the evidence relating to the affairs of Backwell, and of the other goldsmith bankers, among the Records of the Exchequer of Receipt. Indeed, there is in these records alone enough material appertaining to this single banker to fill a substantial volume, material which helps to bridge some important gaps in the economic history of the post-Restoration era. There are the Assignment Books (Goldsmiths' and Pells'); the Receipt Rolls, and the Receipt Books (Pells'); the Issue Rolls, and the Issue Books (Pells'); the Order Books (Pells'); the Privy Seal Books (Pells'); the Registers of Orders for Repayments; and many parcels of miscellaneous Exchequer papers containing actual copies of " orders of loan " and of fiduciary orders.[2]

The transactions of the powerful owner of " The Unicorn " are well in evidence in these remarkable Exchequer books and papers, particularly in those relating to the period 1660–72. Two ponderous volumes, for example, among the Assignment Books (Goldsmiths') [3] are detailed records of the large number of assignments made by Backwell to his metropolitan and provincial depositors out of the annual Royal grant of £17,759 13*s.* 9*d.*, which, from 1677, he regularly received as interest upon his

[1] See also *Cal. Treas. Books*, III., intro. pp. xxvi–xxx.

Seven days after the " Stop," Backwell received £174 1*s.* 8½*d.* at the Exchequer of Receipt. P.R.O., Recs. Ex. R., E 403/1779, fol. 233.

[2] For brief descriptions of these records see Guiseppi, *op. cit.*, I. pp. 178–81.

[3] *Ibid.*, E 406/20–21.

loans to the King prior to the "Stop." These two books prove that most of his depositors were "small" men, frequently minor tradesmen; many of the assignments are for such sums as £3, £4, £6 and £9, £6 representing a deposit of £100.

Backwell's numerous advances to the Exchequer are, of course, all carefully recorded in the Receipt Rolls and the Receipt Books (Pells'), while the interest payments and repayments which he received at the Exchequer of Receipt appear in the Issue Rolls and the Issue Books (Pells'). The Order Books (Pells') contain the substance of the various types of Treasury-Exchequer orders which were issued, and are, like the Issue Rolls and Books, evidence of payments made by the Tellers of the Exchequer of Receipt. Copies of the original authorities for the issue of these orders are contained in the Privy Seal Books, but these are not proof of payment.

The Registers of Orders for Repayment [1] contain numerous copies of the original orders, payment orders to Government creditors, "orders of loan" and fiduciary orders, issued between March 1667 and the end of 1671, together with the records of the assigning (*i.e.* transferring by indorsement) of these orders. These Registers show that large numbers of each kind of order were assigned by the original holders or by intermediate assignees not only to Backwell but also to the other important bankers such as Viner, Colvile, Hornby, Portman and Snow. There are also some excellent copies of orders made out to "Edward Backwell Esq for Repay^{mt} of Loane on the XI Moneths Taxe."

Among the miscellaneous bundles of Exchequer papers are several important documents relating to the transactions of Backwell, including an excellent specimen of a printed fiduciary order for £100, dated 22nd August, 1667, No. 376, registered on the "Eleven Moneths Tax," and issued to the Earl of Anglesey, the then Treasurer of the Navy, "for salaries and wages of officers, seamen and marines." [2] This was assigned by Anglesey to Backwell, who cashed the order at the Exchequer, as is shown by the following curious receipt on the back:

1 die April 1669.

Rec^{d} then of Lawrence Squibb Esq. one of the four Tellers of his Ma^{ties} Receipt of Exchequ^{r} by me Edward Backwell Esq. assignee to the right Hon^{ble} Arthur Earl of Anglesey the sum of one hundred pounds according to the order within menconed. I say rec^{d} by me———————

li
C one hundred pounds.

Edward Backwell.

[1] P.R.O., Recs. Ex. R., E 403/2430–35. [2] *Ibid.*, E 407/119.

This receipt is interesting for two reasons: (1) it proves that the fiduciary orders were not invariably inconvertible, and (2) it contains one of the few surviving specimens of this great banker's signature, a bold modern business hand quite different to the ordinary caligraphy of later Stuart times.

It is thus evident that these Exchequer books and papers form a vast field of valuable documentary evidence relating to the finances of Stuart England. All, however, that is necessary here is to give three illustrations of Backwell's financial activities selected out of numerous examples recorded in the Order Books (Pells'): (1) on 1st April, 1667, he received at the Exchequer payment of an order for £1,750 "for secret service" [1] (2) on 2nd April, 1668, the order paid was for £9,699 5*s*. 5*d*., "in full satisfaction of all interest at vi p. cent together with y^e^ additional allowance of iiij p. cent for y^e^ riske, charge, and service in procuring and furnishing of several sums of money"; [2] (3) on 21st May, 1668, he presented at the Exchequer and received payment of an order of £15,060, "without accompt and for several sums of money by him furnished and paid as followeth": £1,960, "being the remainder of £2,400" advanced to Hugh May, "Paymaster of H.M. Works," on the security of two tallies "levied on Thos Price Esq, Receiver of the Royal Aid for the County of Hereford"; £12,000, "upon seven tallies upon the late Farmers of the Customs"; £1,100, "to Sir Geo. Ashton, Knight, charges during his imprisonment in Holland." [3]

Finally, in view of the fact that the earliest known cheque is dated 1670,[4] it may be mentioned that the Chancery Proceedings of the period prove that cheques were used in "The Unicorn" so early as 1665. In the documents relating to *Viner* v. *Clipsham* (1666),[5] Sir Robert Viner, "knight and bart, cittizen and goldsmith of London," states in his "complaint" that Michael Clipsham and Robert Castle "cittizens and merchants of London" "did upon a joint accompt pay into" his "shopp" "several sums of money all of which were repaid them at several times," and that about September 1665 the said Clipsham "did draw a note or bill upon Edward Backwell, Alderman to pay £500 unto your orator [Sir Robert Viner] upon the accompt of said Clipsham and Castle." This appears to have been a transfer of a deposit

[1] P.R.O., Recs. Ex. R., E 403/2768, fol. 5.

[2] *Ibid.*, fols. 95*b*–96.

[3] *Ibid.*, fol. 113*b*. For numerous details of this nature appertaining to Backwell's loans see *Cal. Treas. Books* I, II, III *passim*.

[4] In the possession of Messrs. Child (Messrs. Glyn, Mills & Co.).

[5] P.R.O., Early Chancery Proceedings (Reynardson), 35/66.

of £500 from the custody of Backwell to that of Viner, for we are told that "Viner or some of his servants did give a note unto Clipsham for the receipt of the said £500." But Clipsham, calling a little later at Viner's shop "to know if Viner had received the £500 from Backwell," managed to obtain "another note signed to him for the receipt of the said £500," and "having got two notes" for this particular sum he, "or Castle or some one on their order did in December and January [1665–6] repair unto Viner's shop and upon producing the said notes did receive from Viner's servants at several times" £1,000 together with the interest due upon this sum. These particular documents are striking contemporary evidence of some of the chief features of goldsmith banking: the keeping of, and payment of interest on deposits; the withdrawal of deposits on demand; the drawing of "notes" or "bills," (*i.e.* cheques) [1] on the banker by a customer; the issuing, and assigning, of the banker's promissory notes.

It is thus clear that the technique of banking was well advanced in England in the first decade of the post-Restoration era.[2]

R. D. Richards

[1] The word cheque was not at this time in use. Such written orders from a customer to his banker were usually termed "drawn notes," and some of the early specimens were sealed by the drawer.

For the origin of cheques see "The Evolution of Paper Money in England," *op. cit.*

[2] I am very much indebted to Messrs. Glyn, Mills & Co. for granting me permission to make a lengthy examination of Backwell's ledgers.

THE ASSOCIATION OF THE MANUFACTURERS OF EARTHENWARE (1784–86) [1]

FORMAL association of the master potters of North Staffordshire dates from 1784, being part of a general movement at that date towards association in all the new industrial centres.[2] The potters had, however, some previous experience of joint action, and Josiah Wedgwood had emerged as the leader of such activities. His part in the promotion of transportation facilities, the agitation for turnpikes and the campaign for the canal, had given Wedgwood the position of leader, had opened his eyes to the wider interests of the potters, and particularly to the desirability of organisation to secure adequate consideration of their economic interests in the political arena. A rapidly expanding industry, mainly dependent on foreign markets, was anxious, for instance, to be considered in commercial treaties. In 1773 we find Wedgwood and Bentley calling on Lord Rockford, Secretary of State for the Southern Department, to canvass the possibilities of trade with France. Lord Rockford did not wish to revise the Treaty of Utrecht, but might arrange " connivance of French ministers at the importation of our goods." The French were ready to negotiate a new treaty, but the English Government felt the present treaty too good to be given up for an uncertainty. In this case Wedgwood was acting on his own. In 1776 Lord North wrote to him about the German trade: " Staffordshire earthenware had interfered so much with the German manufactures, and particularly with those of Saxony, that the German powers propose laying still higher duties upon them." Lord North suggested lowering the duties on foreign earthenware and porcelain, which were very high, in order to obtain like indulgence for Staffordshire ware abroad. Wedgwood called a meeting of the master potters to consider the suggestion. They passed a resolution thanking Lord North for his attention to their interests, and

[1] The writer wishes to express his thanks to Major Frank Wedgwood for permission to work on the MSS. in the Wedgwood Museum at Etruria, and to Mr. Cook, the Curator, for his courtesy and aid.

[2] Ashton, T. S., *Iron and Steel in the Industrial Revolution* (Manchester, 1924), Chapter VII, " Combinations of Capitalists." Bowden, W., *Industrial Society in England towards the End of the Eighteenth Century* (New York, 1925), Chapter III, " The Great Industrialists."

declaring that they had no apprehension from lowering the duties if in exchange for like indulgences. These negotiations were of no effect. In May, 1778, the Chargé d'Affaires at Dresden promised to make every effort to have the duties lowered, " so that merchants can give their orders for the next Easter Leipsig fair." But in August of the same year, one of Wedgwood's customers wrote: " The impost is so prodigious we know not how to renew the commerce." They could not even afford to accept the box of patterns which had been sent.

There were other interests besides foreign trade. In 1782 Wedgwood was up in arms over the proposed tax on carriage: " The whole of the raw materials of which the finer types of earthenware are made is carried some hundred miles, so that the carriage alone amounts in some of them to three-quarters and in others to five-sixths of the value. The carriage of the cheaper kinds to market when manufactured amounts to more than the original price of the goods." Two years later there was a problem of demobilisation; Wedgwood wrote to the Secretary of State for War: " It would be an indulgence well received amongst the whole body of manufacturers if some few of those still in the service and now in England were favoured with their discharge." More important, however, was the political fight for the free use of china clay. Kaolin and petuntse, made known to Europe as the raw materials of Oriental porcelain by Père d'Entrecolles, were eagerly sought by potters and others. They were first found in America; in 1744 Edward Heylin and Thomas Frye took out a patent for the use of " unaker, a produce of the Cherokee nation." In 1754 William Cookworthy discovered these two materials in the parish of Germo in Cornwall. Cookworthy experimented in the manufacture of porcelain at Plymouth, and in 1768 took out a patent. He had some technical and artistic success, but financially he failed, and sold his patent to Richard Champion in 1774. Champion applied to Parliament for an extension of the period of the patent for another fourteen years. The Staffordshire potters,[1] and Wedgwood in particular, were constantly experimenting with every kind of material, including the American discoveries. They resented, therefore, the attempt to monopolise the Cornish clay. " The further improvement of their ware must depend upon the application and free use of the various raw materials that are the natural product of this country," wrote Wedgwood in a pamphlet, *Papers Relative to Mr. Champion's Application to Parliament.* Champion in reply expressed his

[1] For this controversy see Jewitt, *Ceramic Art in Great Britain.*

surprise " that Mr. Wedgwood, who has not hitherto undertaken any similar manufacture, conceives himself likely to be injured "; he hints that Wedgwood has no authority to speak for the other potters, and claims that there is not intended a monopoly, " as long as they only make earthenware." The difficulty of this concession, as Wedgwood hastened to point out, lay in the absence of a definition of where porcelain began and earthenware ended. The proposed privilege, he maintained, was injurious to the landowners by locking up valuable materials; to the manufacturers because " the body is the one thing needing improvement to maintain the trade in competition with the foreigners "; to the public because it would curtail the coasting trade in the carrying of clay to Liverpool; and the export trade by hindering the improvement of the ware, of which nearly £200,000 worth was annually exported. The Commons ignored the potters' case, but Lord Gower secured an amendment in the House of Lords : " Provided nothing in this Act contained shall be construed to hinder or prevent any potter or potters from making use of any such raw material, or any mixture thereof (except such mixture of raw materials and in such proportions as are described in the specification)." Having succeeded in their campaign, Wedgwood and Turner thought it proper to journey to Cornwall, "and examine upon the spot into the circumstances attending them [*i.e.* the new clays], whether they were to be had in sufficient quantities, what hands they were in, and at what price they might be raised."[1] Wedgwood and Turner became joint lessees of clay mines near St. Austell, and left Griffiths, who had formerly been clay agent for Wedgwood in Carolina, to conduct the business. A co-operative Experimental Work was suggested by Wedgwood at this time, for testing clays and glazes, and for the purchase of raw materials. This proposal received no support.

We pass from this informal and spasmodic co-operation of the potters to their first formal association. The lines of its activity can be illustrated from the Minute Book which survives in the Wedgwood MSS. A summary of the minutes follows :—

November 11, 1784. Petition to the Government about trade with France. " That the exportation of their manufacture into France is at present prohibited, though

[1] There is an interesting note in Wedgwood's diary of this tour showing how recently pewter had been ousted by earthenware : " Truro. Glad to hear the price of tin was up from 50*s*. to 60*s*. per cwt., for I had been seriously advised not to trust myself with the miners in Cornwall, the tin trade being very low, they being convinced that Queen's ware was the cause."

French manufactures of a like kind are admitted into this country upon a certain duty."

The next few meetings were concerned with the constitution, the election of the standing committee of twenty-one, and the establishment of correspondence with Birmingham and Manchester.

January, 1785. Complaint to the Canal Company about damage to clay at the wharves. Consider the maintenance of an agent to see that only good clay is shipped.

February, 1785. That a proper person attend the Privy Council, re the Irish Commercial Treaty.

February, 1785. Again consider having an agent to inspect clays before shipping. Consider the present competition in the purchase of flint stones and the advances in price occasioned thereby from time to time, whether some action may be taken with the owners of flint mills? Wedgwood gave an account of the Irish negotiations and suggested that a delegate should watch the further negotiations.

March, 1785. Memorial to the proprietors of the Trent and Mersey Navigation Company. Two-thirds of the whole tonnage between Liverpool and the Potteries consists of clay, flint, and crates of ware. They need greater expedition, better warehousing to avoid damage by weather, and care to keep parcels of clay separate. Particularly bad is Preston quay, where everything is transhipped; a shed to hold 500 tons of clay when 1000–1500 is usually lying on the banks causing a loss of 10*s*. per ton in value.

Memorandum to Littleton and Wrottesley, members for the county, re the Irish Treaty.

June, 1785. Petition to the House of Lords, re Irish Treaty. Also petition against abolition of hawkers and pedlars as likely to lessen the consumption and sale of pottery.

December, 1785. Letter read from Mr. Eden, re French trade. Mr. Fanshawe sent to Devonshire to arrange better supply of raw materials, and to track down the damage. Warning against foreign spies. Vote to support General Chamber of Manufactures.

January, 1786. Ask General Chamber of Manufactures to have potters' wheels and lathes added to the list of tools which may not be exported. Ask for improved postal arrangements. "It being fully confirmed by fresh information

that the potteries have been very greatly imposed upon in the purchase, in the freight, and in the weight of this article, everyone agreed that the concessions of the clay factors were by no means adequate to the relief of the manufacturer and were probably made to bring us into a state of security whilst they formed their monopolies."

February, 1786. Josiah Wedgwood to give evidence re French Treaty. Messrs. Chatterley, Heath and Shelley to go into Devonshire to lease some clay, and settle other matters necessary for the better procuring of that material.

July, 1786. Consider contracts for delivery of clay, terms thought too high. Protest against proposed increase in rates on clay on the canal.

October, 1786. Resolution of thanks to Government for the French Treaty. Messrs. Wedgwood, Warburton, Neale and Baddeley to assist the Government in describing and rating articles for the treaty.

Here the minutes break off; there seems to have been some disagreement, probably political, since in 1789, eighty-four potters subscribe to the resolution that no political decisions shall be taken.

March, 1789. Report of an investigation into the delays of clay at Liverpool. Fourteen days was allowed as reasonable, but the Brig Dawson, which arrived on January 1, and the Brig Fellowship, which arrived on the same day, are only just discharging. Two ships of Poole clay lying since January 14 have not yet been discharged. Three others say that if they cannot discharge soon they will dump their cargo. At a later meeting in March a reply was received from the port authorities promising better accommodation in the sheds at Liverpool.

April, 1789. Memorial to Lords of Trade re Sweden, asking for some relaxation of the prohibition of English manufactures, especially pottery; "as we are in danger on their account of breaking with Russia, to which state we have sent very great quantities of our manufactures . . . further pretension to such claim from the very great quantity of iron we import annually from Sweden."

April, 1789. The Customs have stopped some articles "on the suspicion of their having been collected for the purpose of establishing a manufacture of earthenware at Copenhagen." Byerley has inspected them and found a large

> bound MSS. book in Danish or German, full of drawings of machines and engines, some taken from the Potteries, others from Cornwall, Coalbrookdale, Derby, Manchester, Leeds, Matlock, and Nottingham. The owner had been detected in the potteries during the winter bribing workmen to procure measurements of kilns, etc.

While the majority of the manufacturers were mainly concerned about the supply of raw materials and transportation, Wedgwood was more interested in the development of foreign markets, not only the building up of a marketing organisation and trade connections which was the business of the individual firm, but also the lowering of tariff barriers, which was a matter for common action. There is a memorandum amongst his papers, dated 1785, which illustrates this attitude: To America, Holland and Italy, where duties are low, exports have increased, but they have diminished to Livonia, which has raised the duty from 10 to 40 per cent., to Saxony, where the rate is 40 per cent., to the Austrian Netherlands, where English manufactures pay fourpence per pound weight, including the package, which is nearly three times the value of the goods. France, Prussia, Brandenburg, Sweden, Denmark and Portugal prohibit the importation of English ware. It is therefore not surprising that Wedgwood was interested in commercial policy. It seems probable that he encouraged the formation of the Committee of Manufacturers of Earthenware mainly to bring pressure to bear on the Government to consider the interest of the Potteries.

In 1785 Pitt brought forward his Irish Resolution, which allowed Ireland to share the English foreign and colonial trade, with certain restrictions in favour of the old-established merchant interests, and which proposed a reduction of the customs tariffs between the two countries, with certain exceptions in favour of the landed interests and the old-established manufacturers. The newer industries might take their chance. Pitt stated in a private letter that many of them would probably have to migrate to Ireland. But the new manufacturers had become a political power. In 1784 Pitt's "fustian tax" had united the cotton manufacturers of Manchester and Glasgow, and the humiliating treatment of their delegates in London had been greatly resented. Further, the new manufacturers had realised their common interest; the ironmasters, in their meetings at Worcester, Stafford and Warwick, and the hardware manufacturers, at Birmingham, all backed the opposition to the fustian tax. In opposition to the Irish Resolu-

tions, the new manufacturers were again united. Petitions flowed in from the manufacturing centres, and the leading industrialists came to the capital to "lobby." The Committee of the Manufacturers of Earthenware presented a petition, and sent Josiah Wedgwood to London to give evidence and fight against the Resolutions. Then the manufacturers organised the General Chamber of Manufacturers of which Wedgwood was the first chairman. "It seems hitherto to have escaped the notice of the manufacturers that whilst the landed and funded interests, the East India and other commercial bodies, have their respective advocates in the great council of the nation, they alone are destitute of that advantage; and it is probably from this source that many of their grievances have arisen, that they have so repeatedly and perhaps inadvertently been oppressed by ministers unacquainted with their real interests, and misled by the designs of interested individuals" (Plan of the General Chamber of Manufacturers). The promoters were Richard Walker and Thomas Sylvester of Manchester, Matthew Boulton, Mr. Garbett, Chairman of the Commercial Committee of Birmingham, John Wilkinson, the Ironmaster, and Josiah Wedgwood. Petitions were promoted from local bodies: "I hope the button manufacturers will see their danger and petition" (letter of Josiah Wedgwood). Witnesses were secured, and primed with information, to appear before the Lords of Trade. "He lamented that such a manufacture as iron with four or five petitions in the House should not have a single person to attend to it in the Chamber of Manufacturers, or to speak a word on its behalf at the Bar of the House of Commons" (Wedgwood to Boulton). They broadcasted circulars giving the proposals of the Government and a simple explanation of the manufacturers' position; there are letters from the Duke of Portland, Lord Sheffield and Sir William Eden, asking for copies of their pamphlet, and for other information. Pitt finally made concessions, not sufficient to satisfy the manufacturers, but sufficient to cause the rejection of the treaty by Ireland. The motives of the new manufacturers deserve analysis: first, if the vested interests of the older trades were recognised, those of the newer trades demanded similar recognition; secondly, they objected that reciprocal duties on a few commodities did not give real equality—Ireland sent linens worth £1,400,000 annually to England, England exported only £30,000 worth to Ireland. Altogether Ireland exported £2,000,000 worth of goods to England, then Ireland should admit a similar amount of goods free. Thirdly, it was not only the fear of the Irish competition or the

desire to enter the Irish market that actuated them; but this preference was going to annoy other countries, and make it difficult to negotiate commercial treaties with European countries. A note in Wedgwood's papers illustrates this: a merchant of Brussels applied to the Emperor for leave to import certain English manufactures; he was told that the English had laid such duties on linens of his country as amounted to a prohibition, and that in self-defence the Emperor had prohibited the importation of any English manufactures. This Edict had been suspended, and now the trouble would start again if Irish linen were admitted free.

The productive power of Manchester, Birmingham and Burslem was growing faster than their markets; the pressure of these interests precipitated the Commercial Treaty with France in 1786. Sir William Eden, who had taken the part of the manufacturers in the debate on the Irish Resolutions, was the Commissioner for the negotiations. He was told to ignore the General Chamber of Manufacturers, "a dangerous institution," but to keep in close touch with the individual manufacturers. The treaty was, indeed, almost dictated by the new manufacturers, so that Burke complained that "the opinions of two counties, however extensive and commercial, should not be taken for the sense of the people of England." The treaty, however, destroyed the General Chamber. The older manufacturers, who opposed the dangerous liberal tendencies of the treaty, realising that the new manufacturers had stolen a march on them, succeeded in ousting Birmingham, Manchester and the Potteries from the control and sending a petition against the treaty. They were too late. The new manufacturers withdrew and talked of forming another association. "The idea now started but not anyways fixt is the union of the Chambers of Manchester, the Ironmasters, Sheffield, the Potteries, Nottingham, and such others as are in the neighborhood, to meet at Manchester, Birmingham and the Potteries, either in rotation or as may be convenient, and to maintain regular correspondence." This proposal came to nothing, but informal co-operation continued.

Josiah Wedgwood, in addition to taking a prominent part in the political agitation, provided the technical knowledge necessary for that part of the negotiations dealing with pottery. First he gave evidence before the Lords of Trade. There is no direct trade in earthenware with France, he explained, because of the prohibition, and it is doubtful whether any considerable quantity finds its way there, because of the cheapness and bulk

of the articles. The cost of carriage to France, he estimates, would equal 10 per cent. of the value of the ware. No French earthenware is imported into England, only some of the finer sorts of porcelain. He considered that it would be advantageous to have a direct trade, even though it meant the entry of French goods; the French are fond of Queen's ware, have very few potteries making it, and are handicapped in the cheaper branches of the trade by lack of proper fuel. France would provide a near and extensive market. He would suggest reciprocal duties of from 10 to 15 per cent. and would favour a similar arrangement with Spain. He was particularly anxious to have the 40 per cent. duty in Russia diminished. Before 1779 they had a good trade with Saxony, but then England raised the duty on Dresden china, and Saxony retaliated. Wedgwood urged the abandonment of this duty on china. The American market was temporarily glutted; upon the opening of the American ports the export was very great, and some of the surplus was sent on to the West Indies.

When the principles of the treaty were determined, there remained much detail to be worked out. Wedgwood and three others were appointed, as we have already noted, to assist in describing and rating articles. The main difficulty lay in the distinction between poterie and faience. "If plain self-coloured glazed wares made of two or more coloured clays or glazes, but not painted be admitted as Poterie at 1 livre 8 sous per cwt., this would equal 8 per cent. ad valorem. Glazed ware painted, enamelled or gilt, if classed as Faience will pay 20 livres per cwt., equal to 50 per cent. ad valorem. This will act as a 40 per cent. bounty in favour of decorating our wares in France by French painters, or perhaps English, for enamelling plain ware in France would be a much more lucrative business than making it in England." Wedgwood suggested raising the duty on the former class to 2 livres, and lowering it on the latter to 5 livres. He agreed with the principle of charging by weight, it saved disputes and seizures, and was a spur to the manufacture of light ware. Later there rose a question as to whether a tea-pot with a flowered top is poterie or faience. "By plain I hope no more is to be understood than not painted"; if any raised ornament converted the ware from plain to decorated, this would cramp the industry.

The manufacturers certainly got their wider market; in Wedgwood's correspondence for 1787 we find letters from French towns asking for the Wedgwood agency, and from transportation companies: "In consequence of the Treaty of Commerce, we

have begun to expedite all sorts of English goods. If you have any ready for Messrs. Honore & Co., or any of your correspondents, I shall be obliged to you to address them forthwith to me." The reactions on French industry were extremely serious, but fall outside the scope of this study.

Dr. Witt Bowden suggests that the readiness with which the new manufacturers descended from the throne of monopoly and ventured into new economic relationships without the safeguards of the old protective system was prompted primarily by a sense of their unmatched superiority in methods of production. The manufacturers might well have felt secure in contemplation of the enormous improvements in that century. Nevertheless one can detect in the Potteries a certain feeling of the precariousness of English industry. (In the Wedgwood papers there is a pamphlet on the French Treaty of 1786 which illustrates this feeling:) The French produce wines, brandies and oils, which, being indisputably productions peculiar to their climate and soil, are permanent; the English have only their present superiority in manufacture, which is variable and transient. England is dependent on other countries for basic raw materials, *e.g.*, wool, cotton and iron. In France labour is cheap, and the manufacturers are free from the bad policy and destructive effects of the excise laws, which render a large capital necessary, greatly enhance the price without producing an adequate revenue to the State, and subject the manufacturers to the vexatious control of the revenue officers. There remain only the advantages of capital and skill. France is not wanting in wealth, but from the prejudices of her nobility her wealth has not hitherto been applied to the promotion of industry. The chief deficiency is skill, but workmen are being seduced daily to emigrate to France. It is to our machines, presses, dyes and tools that we are most indebted; in proportion as they are exported and copied in foreign countries, our exports of manufactured goods must decrease. The potters were prepared to take a chance to get the foreign market, but their lack of confidence is shown in the policy, which Wedgwood strongly supported, of prohibiting the exportation of machinery and the emigration of artisans. This is confirmed by a comment of Enoch Wood, written in the margin of his copy of Shaw's *History of the Potteries*: "I have often heard my father say everybody blamed his father for making his sons potters, it could not last long." Then, when Shaw describes the natural advantages of North Staffordshire: "Therefore the trade has lasted longer than was predicted." Perhaps it was less their

confidence in their unmatched superiority, and more the pressure of increasing production in a restricted market, that explains the liberalism of the new manufacturers.

Precautions were taken by the manufacturers to enforce the prohibitions against the export of machinery and the emigration of artisans. The minutes of the potters' association gave an example of the attention of the manufacturers to the export of machinery. They were also strictly on their guard against spies who might communicate designs to foreign competitors; information about spies was exchanged with other manufacturers. There is some humour in some of the suggestions, *e.g.*, a large press notice of the painful death of one of these spies, in the hope that others would be discouraged by this obvious judgment of Heaven. On the subject of emigration the General Chamber of Manufacturers had strong views. They sent out a circular describing the drastic measures of the Emperor's Edict for preventing the emigration of workmen. "We are sensible of the inestimable value of civil liberty, and that no restriction would be put upon it without an obvious and sufficient cause, such as the welfare of the State . . . it is not without some regret that we feel ourselves compelled to point out to the legislature the necessity for some effective regulation to prevent the emigration of our artificers. Their unrivalled skill has excited the envy of foreign nations." Wedgwood believed in appeal to the workingman; his "Address" opens with some frightening stories. One man went to South Carolina and met shipwreck, disease and commercial failure; another went to Pennsylvania, where the proprietors gave up the undertaking and silenced the just complaints of the injured workmen by clapping some of them into prison; finally George Shaw wants to come back from France; they earned high wages till some apprentices learnt the work, then wages fell. There follows an appeal to sentiment: "Would it have no weight with you to think that you were ruining a trade which had taken the united efforts of some thousands of people for more than an age to bring to perfection, a perfection nowhere else to be found . . . an object exciting at once the envy and emulation of all Europe? Englishmen in arts and manufactures, as well as in arms, can only be conquered by Englishmen, the enemy must first gain over some traitors and renegades from among ourselves. Is there a man of you who will stand forth and acknowledge himself to be that traitor to his country and fellow workmen, who will openly avow, for the sake of a paltry addition to his wages for a few years, he would betray their in-

terests and wantonly throw away into the hands of foreigners, perhaps of enemies, the superiority we have thus laboured for and attained ? "

Of price agreements in the eighteenth century we hear little, perhaps their success in developing markets made restriction of production unnecessary. There were some short-lived agreements. In 1770 : " We whose hands are hereunto subscribed do bind ourselves, our heirs and assigns in the sum of fifty pounds of good and lawful money of Great Britain not to sell under the written specified prices." There follow the signatures of twenty-eight potters, a price list and a clause dealing with the most obvious form of evasion : " to allow us more than 5 per cent. for breakage and 5 per cent. for ready money." Of this association no more is known than that it was formed. The next reference is found in the papers of Enoch Wood, a distinguished Burslem potter; in 1795 the potters met to oppose a rise in the price of crates, and in January 1796 to arrange a system of prices of pottery. The meeting must have had some effect, since there is a letter in Enoch Wood's papers, dated April 1796, from the Yorkshire potters : " By direction of the Committee I beg leave to send you the resolutions entered into by the Manufacturers of Earthenware in Yorkshire, which it is hoped will be considered a complete refutation of the reports that have prevailed of their underselling the Staffordshire manufacturers." The next example of such action was in 1814 : " At a general meeting of the Manufacturers of Earthenware, held at the Swan Inn, Hanley, on March 8, 1814, Josiah Wedgwood in the Chair. Resolved : That in consequence of the increased prices of raw materials a proportionate advance of the price of earthenware is indispensably necessary. Seconds must be charged three-quarters of best, 2*s*. 6*d*. per package for straw, no purchaser may provide his crates, if not payable in London deduct $2\frac{1}{2}$ per cent. from the discount otherwise allowable, lump ware to be destroyed and not sold." Not till 1836 did the strength of trade unionism call for the organisation of an employers' association, and even that was short-lived. We may suppose, however, that it was customary for wage changes to be concerted informally by the manufacturers.

V. W. Bladen

The University of Toronto.

ITALIAN MÉTAYAGE

In Central Italy can be found a most striking example of the vitality of an economic and social institution persisting through the centuries in serene indifference to radical changes in government, in ideas, even in the prevailing economic organisation. In all essentials, despite some hesitating attempts to fit the customary land system into the narrow formulæ of legal definition, it remains to-day what it was in the fourteenth century.[1] It has even, in recent times, been transplanted into parts of Italy which, owing to their different geographical conditions, had developed, during the Middle Ages, land-systems of a different type. It is, however, most profitable to study it in those districts where it is most deeply rooted—in Umbria, or the Marches, or, best of all, in Tuscany.

Mezzadria (or *mezzeria*) is a form of *métayage*, and, as its name implies, carries with it the idea of halving. Its central principle is that landowner and tenant should co-operate in the task of exploiting the land, and should share its produce. Custom has laid down with great definiteness the terms of this partnership, of which the following are the most important :[2]

1. The owner provides the land—drained, planted, equipped with animals, forage, manures, farm buildings.
2. The tenant provides the labour.
3. The yearly expenses of cultivation are divided equally between landowner and tenant.
4. Annual profits from the holding are divided equally between landowner and tenant.
5. Taxes and the upkeep of fixed capital are burdens on the owner.
6. The technical direction of labour on the holding is in the control of the owner.

These are the chief points in the agreement. There are, however, many other articles of considerable importance. The

[1] See article by the Marchesa Niccolini in *American Historical Review*, October 1926; and by P. Santini in *Archivio Storico Italiano*, 2nd ser., XVII., 178–92.

[2] For these general notions consult: S. Sonnino, *La Mezzeria in Toscana* (Firenze, 1877); A. Rabbeno, *La mezzeria e i vari sistemi della colonia parziaria in Italia*, Hoepli, 1895 (with bibliography); F. Serragli, *Un contratto agrario* (*La Mezzadria Toscana*), Firenze, 1908.

owner is obliged to provide only the capital actually sunk into the land or fixed upon it in a very real sense ; it is the tenant's business to supply the minor implements. Vehicles and machines are supplied sometimes by the owner and sometimes by the tenant ; but the tenant is always charged with their maintenance and repair—with the exception only of those machines which gather and handle the harvest, especially the presses for wine and oil. These belong to the proprietor, and the tenant gives a proportion of his harvest (from 2 to 5 per cent., or even 7 per cent. in the case of wine) for the right to use them.

Again, the tenant has the right to keep a small garden for his household use, and can run his own poultry, saving only his obligation to make tribute of a few dozen eggs at Easter, and a fowl or two at Christmas. On the other hand, he is under the obligation of doing a certain amount of day-labour beyond the limits of his own holding ; for this he is paid at a fixed rate. Custom varies with regard to the seed for corn ; sometimes the tenant supplies it, and sometimes the owner. But this, and other variations (which are indeed numerous), never affect the principle of the contract. The contract is a yearly one ; the peasant may give notice, or the proprietor may declare his *disdetta* (dissolution of the contract) at a stated time in any year. According to a Tuscan law of 1785, the *disdetta* must be declared in November (hence the saying, *avanti S. Andrea*—before the festival of St. Andrew), and the tenant who has received notice may stay on his holding until the following March. In practice, custom insists on a statement preliminary to the formal *disdetta* being made in August.

The contract is almost invariably a verbal one, but it is recorded in the owner's *libretto colonico*. The contracting parties are, on the one side, the owner (*padrone*), and on the other side the *famiglia colonica*. This means that in the eyes of the law the tenant is not a single individual, but a family. Within the family there is a head (*capo di casa* or *capoccia*) who represents it in its contractual relationships, and binds it by his decisions. The *padrone*, when his estate (*fattoria*) is a large one, is sometimes represented by his bailiff, the *fattore*. The tenant's holding is called *fondo* or *podere*, and is defined as "that complex of things and lands which can, because of their extent and character, be worked by a *famiglia colonica*." The number of *poderi*, of course, varies with the extent of the *fattoria ;* a small *fattoria* may have only two or three, but last century the amalgamated *fattorie* of Brolio and Meleto, belonging to the Barone Bettino Ricasoli,

possessed seventy-eight. Only the most energetic and laborious of owners could attend adequately to so large a community, and at the present day Brolio and Meleto are under separate management. Any *fattoria* which contained more than 25 *poderi* would to-day be considered large.

Having considered the juridical framework of *mezzadria* we may now pass to an examination of its geographical and historical bases. The vitality of *mezzadria* is explained by its perfect adaptation to the conditions of the soil. The land-system of Tuscany grew up naturally to meet the peculiar conditions of the country. With the exception of the Val di Chiana in the south and the Maremma along the coast, Tuscany (like Umbria, where a similar but less Utopian system prevails) is continuously mountainous. The hills run in parallel lines from north to south, buttressing the great central mass of the Apennines; the rivers cut their way between the ranges in very eccentric fashion—the Arno, for example, runs south through the Casentino and then north through the Val d'Arno, while the Chiana independently insists on running north, instead of south, like its easterly neighbours the Paglia and Tiber. These rivers have as a rule broad straggling beds, sometimes muddy, sometimes stony; in the summer they may dry up, while in winter they become raging torrents. The great curse of Italy has been the destruction of forests. Not only has this destruction marred the beauty of the country, but it has dried up the springs and intensified the devastating force of water in the seasons of heavy rain. Thus Tuscany has always the fear of drought in summer and the fear of flood in winter. When there is a storm, the water will not content itself with a happy rush in the large established watercourses. It strives to pour down the mountain-sides just as it pleases, for there is little surface soil above the rock, and very little protecting vegetation. . . . How is it, then, that "garden Tuscany" has won its reputation for fertility? The answer is painted in the compositions of a hundred Tuscan artists. Having aggravated the conditions averse to agriculture by cutting down the forests, man then set himself to resist them by digging drains and building terraces. The terrace is as persistent a feature of the landscape of Tuscany as is the hedge of England. But, unlike the hedge, it does not testify to a work of private egoism sometimes approaching robbery; it is a monument to centuries of harmonious co-operation between capital and labour.

No country could be more unsuited to a system of *grande culture* than the mountainous districts of Tuscany. Agricultural

machines do not like dodging rocks, climbing terraces, jumping watercourses, in plots of land which often are little bigger than a pocket-handkerchief. They may be capable of dealing with scrub and stumps in a large field, but they are nonplussed when new bewildering obstacles appear with every fifty metres. If it were possible to wipe out the centuries of experience and tradition which are embodied in Tuscan *mezzadria*, it is very likely that even to-day, despite the vast progress made in scientific agriculture, exploiters of the soil would be forced to adopt a not very different system of *petite culture* on a co-operative basis. Lovers of Virgil are surprised and excited when they discover Tuscan peasants using that same wooden plough which is described in one of the more difficult passages of the *Georgics ;* but this is evidence of no mere sentimentalism or ignorance. The wooden plough is retained in certain districts because more modern implements would too ruthlessly scatter the scanty priceless layer of soil which lies above the hard rock. It is extraordinary to see the laying-down of a new vineyard in the Chianti ; the labourers are compelled literally to lift away an almost unbroken surface of rock, to spread evenly the soil which lies in the crannies, and to dress the whole area with loam which has been washed down into neighbouring hollows or valleys.

No country is greedier in the demands which it makes upon labour. Large estates, worked by a centralised administration, would be as anomalous to-day as they would have been in the Middle Ages. Without the constant care of peasants responsible for a small area of land—tending the surface of the soil, strengthening the terraces, looking to the ditches, repairing assiduously the ravages of sun and rain—the hills of Central Italy would sink into a state of arid desolation. The land is, in a sense, greedy also of capital. The vines, most sensitive of economic plants, must every year be sprayed with sulphur dust or sulphate of lime ; the soil, not naturally fertile, calls for a constant application of manures, while every system of *petite culture* demands a large outlay for dwelling-houses and farm buildings. But much of this capital can be accumulated by the direct labour of the peasant. When he lays down a new vineyard, he quarries at the same time stone for terraces and for buildings. " He gathers the manure that has fallen on the roads, that it may contribute to his dunghill." His meticulous struggle against wind and rain has taught him to snatch every tiny advantage ; and a sewerage system would seem to him sheer waste. " The cultivator," says Capponi, " is always on the spot, always careful. His constant

thought is, 'This field is my own.'" [1] Capponi has gone to the root of the matter; *mezzadria* owes its vitality to the strong appeal which it makes to the motives of a simple people. Another Tuscan who knew the peasant equally well, Giuseppe Giusti, said that the proprietor who turned away from *mezzadria* in the hope of larger profits might seem to thrive for a time. In the end he would rue his impatience. "The day labourers come, and because they are not working for themselves, they trample across my fields and banks, tread them down and break down everything. If when I am digging I encounter a root of olive or vine, I carefully move it aside, but a day labourer drags it out. He wants to get to the end of his task, and the result doesn't affect him." In the Middle Ages, *mezzadria* assured to the landowner what he most needed, labour; it secured to the *contadino* what he most needed, land, and the simple capital necessary for its cultivation. The system satisfies the same complementary needs to-day.

It is for these reasons that the system still rests upon *custom* rather than upon law. The code of 1886 classed *mezzadria* under the general law of tenancy, thereby consecrating the landowner's right of yearly *disdetta*. Since 1886 the peasant has received no extension of legal protection. Yet it is a well-known fact that on many estates the same families have lived in the same stone houses for centuries. If the family is reliable, the *padrone* has no inducement to turn it away, interrupt the continuity of cultivation, and perhaps find himself worse off than before. Even if the family is unreliable, he finds himself in a difficulty, for the power of custom is so strong that the owner who exercises his legal right of *disdetta* finds himself the talk of the whole country-side, is pointed at, scowled at, just as if he had committed a grave moral offence. In post-war days adherents of the *Partito Popolare* formed "white" organisations which sought to arouse the *mezzaiuoli*,[2] and demanded the embodiment of custom in law, at least to the extent of increasing the duration of the contract by two years.[3] Such a reform would not have done any harm, but it is doubtful whether it would have done any good. When a *padrone* has not the moral courage to defy public opinion by sending even a thriftless drunken peasant about his business, it may be doubted

[1] Capponi, *Cinque Letture sull' Economia Toscana*, No. 5. Cf. T. Guarducci, *Il Chianti vinicolo*, Sancasciano, 1907.

[2] The name given to peasants under the system of *mezzadria*.

[3] M. A. Martini, *Le agitazioni di mezzadri in Provincia di Firenze*, p. 16 ff. (Firenze, 1921).

whether the great mass of orderly families need be haunted by the spectre of an arbitrary eviction.

It is now time to consider a little more definitely some of the economic characteristics of this system.

1. The first distinguishing mark is the part played by the family as the unit of labour. One sees in the fields of Tuscany labourers of both sexes and of all ages. Small children are sent into the vineyards to scare away birds, or into the waste uplands where no crops will grow to look after the geese, the goats, or the sheep. One may find young girls of sixteen singing with the sheep like the shepherdesses of the Eclogues, but there are no poetical young shepherds piping to them, for the young men have more strenuous work in the fields. In the fields, too, one may see the old men working, and the old women—saving a lira or two of waste by picking up the fallen olives, or gathering sticks and prunings which will crackle under the Old Testament pot that hangs over every peasant's fireplace. Out of the midst of mulberry trees maidens appear dramatically with sacks full of leaves gathered for the silkworms, for silk production is the most profitable of Tuscan domestic industries. The employment of the family as the unit of labour admirably meets the demands which the special conditions of the soil make upon the care and the diligence of men.

2. As the family is the unit of production, so its needs as the unit of consumption have given a peculiar twist to the agriculture of Central Italy. *Mezzadria* has nothing to do with money wages (except in so far as the peasant is paid for *opre*, extra days of work which the proprietor has the right to claim). The peasant receives his income in kind; to him belongs half the produce from his *podere*. This is the root cause of the persistence of subsistence farming in Tuscany. Both *padrone* and *mezzaiuolo* have generally agreed that a *podere* should produce all that is necessary for the support of the family which occupies it. The typical Tuscan *podere* will have rows of vines with cabbages or other vegetables between them, it will have a plot of beans and a grove of olives, a little rye or wheat for bread (though the majority of peasants now buy their own bread), some maize to make *polenta*, and in the rougher ground some chestnuts, from which is made an even more indigestible meal. There will also be some beasts, chiefly for draught, sometimes for milk and cheese, hardly ever, except in the case of pigs, for meat—and there will, on a well-managed estate, be fodder for the beasts. It is this self-sufficing husbandry which has given to Tuscany its peculiar

garden appearance; but with the advance of facilities in transport and credit the system must be profoundly modified. Even in the first half of the nineteenth century, strong champions of *mezzadria* had begun to fear that subsistence farming was an obstacle in the way of improved efficiency and the increase in Tuscany's gross agricultural production. "The erroneous self-sufficing system pervades everything," lamented Capponi, "even to the extent that a single field should produce everything, that a single man should do everything." [1]

3. As the family is the unit of production and consumption, so also is it a unit of management. It is a patriarchal organisation, under the sway—not absolute, but very effective—of its *capo di casa*. The person representing the family in its contractual relationship with the *padrone* must of necessity possess within it some disciplinary power. The imposition of responsibility upon the *capo di casa* naturally leads to his assumption of authority; he directs and controls the economic life of the family, allotting to the various members their various tasks. He is also master of the family's social activities; he decides when and how his daughters shall marry, and thinks himself responsible for the virtue and Christian conduct of his sons. Within the house, however, he yields place to the *massaia*, who exercises the same undivided control over the women, and is mistress in all domestic matters. The peasant family is a simple community, and even grown men of fifty yield unquestioned obedience to the powers which nature and the will of the *padrone* have set over them.

4. As between the family and the proprietor, there are the same relations of despotism—a despotism so much a product of the soil and of centuries, so greatly tempered by custom, so suitable to the ordinary needs of the people and so much taken for granted, that it seems almost misleading to give it that name. Nevertheless, it is a fact of great economic and social significance that the *padrone* possesses in full the right of directing the activities of each family upon each holding within his *fattoria*. There is no division of management. When the estate is a large one, or when the proprietor is lazy or an absentee, the *fattore* intervenes between the families and the *padrone*. At the beginning of the nineteenth century absenteeism was very common in Tuscany, with the result that the *fattori* took advantage of their position to feather their own nests at the expense of their masters, and, so far as the resistance of established custom would permit them, at the expense of the peasants. A Tuscan proverb records the

[1] Capponi, *op. cit.*, p. 40.

popular opinion of these persons in no complimentary manner: "Fammi fattore un anno, e se non diventero ricco sarà mio danno."

"Make me a bailiff just for a year,
I'm either a fool—or a millionaire."

But the old type of *fattore* is passing, and his place is being taken by efficient managers trained in the agricultural schools. A bullying or unscrupulous *fattore* might do much to poison the easy personal relationships which bind together the *padrone* and his *contadini;* but generally these relationships flow gently through the old channels, sweetened by lazy, unselfconscious, mutual understanding.

Problems of the Nineteenth and Twentieth Centuries

The question which champions and critics of *mezzadria* have been asking for the last hundred years is: "Can this customary conservative system adapt itself to modern demands for increased production?" This question has become ever more insistent as the population of Italy has pressed more strongly upon subsistence, as the number of city-dwellers has kept on increasing, as improved transport, the development of credit, and the internationalisation of trade have broken down the isolation of rural communities. Before considering the attempts which have been made in different periods to adapt *mezzeria* to the new conditions, it will be as well to consider how far the psychology of the peasant, moulded by centuries of customary subsistence farming, is likely to adapt itself to novel requirements.

The history and literature of the nineteenth century make it possible even for those who do not know the Tuscan peasants at first hand to gain a fairly accurate idea of their mental habits. In each crisis of modern Italian history the Tuscan peasant proved his conservatism.[1] And this conservatism is not merely an affair of politics; it is part of a very deeply rooted attitude to life. Capponi began the good habit of collecting the proverbs which embody the traditional wisdom of the peasantry—proverbs which have been handed down through the centuries from generation to generation, and are current in the fields to-day. They offer to the peasant an apt saying for every occasion of this transitory life—for each season of the year, each hour of the day, each change of wind, each product of the soil, each method of producing it, each temptation, each trial, each domestic event,

[1] W. K. Hancock, *Ricasoli and the Risorgimento in Tuscany* (Faber and Gwyer), Chapters I, V, VII, IX.

each human relationship. What they reveal most clearly is an innate conservatism.

> " Chi lascia la via vecchia per la nuova
> Sa quel che lascia, ma non quel che trova."
> " Who turns aside from paths of yore
> Knows what's behind—not what's before."

Other proverbs advise the peasants to praise the sea but hold fast to the land (" Loda il mare e tienti alla terra "), to be content with the wisdom of the fields, accepting things as they are, and not seeking restlessly for explanations, because :

> " Il libro di perchè
> Stampato ancor non è."

" The book of ' Why ' has never yet been printed."

The conservatism and caution of these adages merges often into a gentle cynicism ; passion, display, eloquence, even hospitality, may lead a man from the paths of prudence, may jeopardise his hardly-won security. " L'ospite e il pesce in tre giorni puzze," —" The guest, like the fish, in three days begins to stink." " La ragazza è come la perla, meno che si vede e piu è bella,"—" A maiden is like a pearl : the less you see of her, the more beautiful you think her." A score of proverbs breathe frank alarm at the beauty and wiles of women ; passion, like the lawyer, is ever at hand to flatter and distract the peasant with illusion, to entice him from the path of steady prudence which alone leads to security and contentment. Young men are warned in a hundred wise jingles that they will never need a hammer for knocking at a lawyer's door, and that a beautiful head is often without brains : that much talking is the lawyer's harvest, and that a hasty, injudicious marriage means affliction for life.

> " Chi male una volta si marita
> Se ne sente tutta la vita."

The peasant must be diligent, but not hustling ; not close-fisted, yet parsimonious. When there is little bread at the table, the discreet host will hold his portion tightly in his hand, for one " Grip Grip " is better than a hundred " Grab Grabs."

> " È meglio un tieni tieni che cento piglia piglia."

Tuscan landowners, according to their various temperaments, have regarded this all-pervading conservatism either with complacency, with affection, or with irritation. Throughout the nineteenth century they continually congratulated each other that their country, at any rate, need never fear a communist rising. But, on the other hand, could it hope to share in the world's Progress ? A belief in Progress or Enlightenment (*Lumi*)

was part of the legacy of the eighteenth century to the earlier generation of the nineteenth. There arose in Tuscany a group of well-born landowners who believed with equal passion in Parliaments, Gas, Elementary Education, and Scientific Agriculture. Before the close of the eighteenth century they had formed for their mutual encouragement a society called the Academy of the *Georgofili ;* in this academy they read to each other frequent papers on various questions of economics. Above all, they concentrated their attention upon the land problem. It was notorious that many of the great landowning families of Tuscany were being gradually ruined. Mere subsistence farming was already becoming out of date ; the oil and wine and odds and ends of agricultural produce which the *padrone* received from his estate brought him a poor return in money. According to the *Georgofili*, the landowners were themselves directly responsible for their poverty. Too often they were ignorant absentees. They must get back to the land, study the methods of scientific agriculture, and, by persuasion or compulsion, introduce these methods among their peasantry. Their aim must be an all-round increase both in the quantity and the quality of production, so that their goods might secure a fair money-return in the markets of Tuscany, of Italy, of Europe.

The discussion waxed hot during the 'thirties, when prices were at their lowest level. During the 'forties railways and the telegraphs spread throughout Tuscany and Italy, bringing foreign markets within easy reach. In the 'fifties, a fungus called the *crittogama* attacked Tuscany's staple product, the vine, and spread ruin among Tuscan landowners. This was a rude test A question which had long been at the back of shrewd heads among the *Georgofili* now came from their lips : was *mezzadria* capable of adapting itself to these new conditions ? Was the peasant's conservatism an insuperable obstacle in the way of adequate improvements ? Was the *mezzaiuolo's metà* (half) too large a burden upon the proprietor, who shouldered the taxes, the heavier capital expenses, the losses which came from fluctuations in price ? It was no less a person than the president of the *Georgofili*, Cosimo Ridolfi, who raised the " cry of alarm." [1] Ridolfi said in effect that *mezzadria* was for the peasant a partnership of " Heads I win, tails you lose." The peasant's livelihood was always the first charge upon production ; whatever happened, the *famiglia colonica* must retain enough of the yearly harvest to satisfy its

[1] See *Atti dell' Academia Reale dei Georgofili*, Vol. XXIX., 355 *et seq.*; *ibid.*, nuova serie, Vol. I. and Vol. II., *passim*.

own needs. The landowner must content himself with what remained. From eight of his best *poderi*, declared Ridolfi, he had in recent years received only one-tenth of the produce, instead of the half which was his due. He added that, throughout the length and breadth of Tuscany, peasants were generally in the debt of their *padroni*. *Mezzadria* was a good enough system for times of stability and prosperity, but because of its hopeless, unmanageable conservatism it was incapable of supporting any sudden crisis. Tuscan agriculture could not be saved (and in particular the Tuscan landowners could not be saved) without the constant adoption of scientific improvements—an impossibility so long as the present system remained unmodified. Ridolfi protested that he was far from advocating the complete overthrow of the system. All he desired was its suspension in times of crisis. He himself was introducing on his *fattorie* a system of short leases, at the same time keeping complete technical control in his own hands. When he had weathered the storm he would return to the old methods.

This dismal pronouncement raised a storm of controversy. Capponi, who for more than thirty years had been nurtured on the study of history, saw in Ridolfi's attitude almost a betrayal.[1] He demanded shrewdly whether Ridolfi was thinking of the gross production of Tuscany or (like the Enclosers of sixteenth-century England), of the net profit of landowners. Others pointed out that the trouble lay less in the special characteristics of the Tuscan land system than in the ravages of the pest itself, which would have occurred under any system. *Mezzadria*, they said, had in reality softened the blow; for few of the landowners possessed the knowledge and energy of Ridolfi, and might congratulate themselves that they were not called upon to direct and to pay a large body of wage-earners. The argument was a shrewd one; but, after all, the best reply given to Ridolfi was the unspoken answer of example. The largest of all Tuscan estates—the *fattoria* of Brolio, belonging to the Barone Bettini Ricasoli—had come triumphantly through the crisis.

The story of the estate of Brolio during the last hundred years is a most interesting and instructive chapter in economic history. It gives conclusive proof that it is possible to achieve a complete revolution in Tuscan agricultural method without sacrificing one article of the customary pact which has for centuries united landowners and peasants.[2] When Ricasoli took charge at Brolio the fortunes of his family were at their lowest ebb. Methods of

[1] Capponi, *Lettere*, III. 156 ff. [2] Hancock, *op cit.*, 55 ff., and references.

farming on the estate were antiquated and inadequate; the olive crop had been ruined through neglect of scientific drainage, and the peasants had given their exclusive attention to viticulture and the fattening of pigs—both of which industries brought in the lowest of returns in money. Ricasoli described the technical measures which he had taken—his attention to the olive trees (he had been trained as a botanist), his insistence upon the growing of forage for the farm animals, his researches into viticulture. His own note-books record expeditions in the Bordelais and the Bourgogne, where he studied the red wines of France, and gathered the experience which has made famous the wines of the Chianti. For it was this very man and these very researches which produced the genuine Chianti—not that false, factory-prepared liquid which comes from Pontasieve, labels itself Chianti Ruffino, and is, as every peasant knows, *maliziato ;* but the prime, mellow, " sincere " Chianti which bears the stamp of the district association, and has a gentle richness surpassing the flavoursome maturity of the finest claret. The *cantina* of Brolio—chamber after chamber of rotund casks from which the wine is drawn into the exquisite Brolio bottles—is to-day a testimony that the wealth of the *padrone* and the prosperity of the *mezzaiuoli* are based no longer upon subsistence farming, but on the production of a superfine article for export. This triumph was achieved by the nineteenth-century baron. And when, in the 'fifties, the *crittogama* attacked his vines, as it attacked those of his neighbours, neither he nor his peasants were crippled by their losses. During the previous decade Ricasoli had been specialising in another direction ; he had copied the experiments of his friend Lambruschini in the rearing of silkworms, with such notable results that the quantity and quality of Brolio silk was sufficient to maintain the fortunes of the seventy-eight families on the estate, even when the profits from Brolio wine had sunk to zero. Brolio had become, within a generation, the model progressive estate of Tuscany. The great palace which Ricasoli built within the old fourteenth-century walls testified to the triumph of scientific agriculture. But the well-ordered homes and holdings of the *mezzaiuoli* proved that the secular institution of *mezzadria* was capable of adapting itself to the demands of a new age. To this very day the centuries-old system of *mezzadria* exists side by side with a most elaborate scientific technique directed to the end of production for export. The only inroads made into the system have come from the side of the peasants, several of whom, in recent years, have bought their own holdings.

There could, indeed, be no objection to the gradual transformation of *mezzadria* into a system of complete peasant proprietorship; but this could only happen on estates such as Brolio, where wise management has steadily raised the fortunes both of the landowner and his tenants. Very few Tuscan estates have won such a dramatic success. The majority of aristocratic *padroni* would be too disdainful or too bored to check accounts, ponder over manures, peer into drains and dive into pigsties, like the present Baroness Ricasoli. A pessimist might still lament, as Capponi lamented a century ago, that the erroneous self-sufficing principle pervades everything. Large numbers of proprietors have remained ignorant of the land from which they derive their income, and have permitted the peasants to keep on planting and harvesting with their own direct consumption as the chief end in view. But, throughout the fifty-four years which intervened between Tuscany's union with Italy and the outbreak of the European war, the rapid industrial and financial growth of Italy and of the world rendered conditions continuously more hostile to this subsistence husbandry. Apathetic landowners began to feel the pinch ever more keenly; and some of them, at their wits' end for ready money, were tempted to take the easy road and recoup themselves at the expense of their *mezzaiuoli*. Foreign students of Italy, such as Bolton King and Thomas Okey, noticed before the war a tendency on the part of a minority of Tuscan proprietors to reduce *mezzeria* to *terzeria*—that is, to take for themselves two-thirds of the produce of their estates, reducing the peasants' share to one-third. They pursued also various petty offensives against their *mezzaiuoli*, increasing the small tributes of eggs and fowls; twisting the *opre* into a means of securing cheap labour; or even abusing their position as the peasants' bankers (the *mezzaiuolo* often continued his *conto corrente* with the proprietor from year to year) to play the part of usurers. These practices were not so common in Tuscany as they were in Umbria or the Marches; but they were common enough to develop a feeling of unrest inimical to the spirit of co-operation on which *mezzadria* ultimately depends.

In addition, the new political organisation of Italy as a modern State was producing material and psychological conditions which might menace the old system. The heavier taxation which followed the merging of Tuscany into Italy was one of the burdens which the less efficient landowners tried to lay on the shoulders of their peasants. The peasants, already uneasy at the changes taking place around them, began almost in their

own despite to take some interest in political matters. The new remote Government was gathering their children into its machine for wholesale education. It is true that in 1910 more than half the population of Tuscany (excepting the districts of Lucca, Pisa, Livorno and Pistoia) remained unable to read; but with every year this proportion was reduced, and every year an increasing number of children brought copy-book maxims and patriotic stories of the *Risorgimento* into families whose wisdom had been stored in proverbs, whose history had been the legends of the saints. Then in 1912, Giolitti's Government carried a Bill introducing manhood suffrage. Politicians began to pay more attention to the *contadini*, and the advanced parties painted dazzling pictures of a fatherly State doing all those things which for centuries the peasant families had done for themselves. It was for a time the avowed object of the Socialists to overthrow the self-regulating family system, and to merge the *mezzaiuoli* with the great mass of Italian wage-earners. There were some disturbing signs that the patriarchal family was indeed weakening: young women going into service in the towns, young men seeking employment in the factories. How long, it was asked, would the peasants be content with their old, simple standard of life? In 1902 and 1906 there were agitations of *mezzadri* in various Tuscan provinces; in 1910 more than 6000 *mezzaiuoli* were enrolled in Labour organisations.

Those who knew most about the Tuscan system did not doubt that a little intelligence and foresight would preserve it against the new dangers. The advocate M. A. Martini proclaimed in 1910,[1] as Ricasoli had proclaimed seventy years before him, that, if *mezzadria* seemed to be falling, it was the fault of idle and ignorant owners, not that of their peasants. Martini demanded as Ricasoli had demanded, attentive management, specialisation, in cultivation, and attention to the needs of the market. He pleaded also for the effective organisation of agricultural credit, in which Tuscany had fallen far behind other districts of Italy. The *casse provinciali*, which directed to Sicilian agriculture a yearly stream of nearly 20,000,000 lire, were unknown in Tuscany, which could only point to the *piccolo credito toscano* with its current account of something like 87,000 lire—a figure which appeared *molto, troppo piccolo*. The Savings Bank of Florence had done nothing at all for agricultural credit. Martini claimed with justice

[1] M. A. Martini, *La Mezzadria Toscana nel momento presente*, Firenze, 1910. (A short and useful study of the pre-war position.) For a more pessimistic viewpoint see *Rassegna Nazionale*, June 1, 1909.

that, if the landowners and the banks performed their duties, the peasant would perform his.

There was, indeed, little inducement for the hard-headed *contadino* to put his hope in the wage system and the hypothetical advantages of a hypothetical new social order. Calculations of the income of a *mezzaiuolo* present many difficulties, owing to the multiplicity of the sources from which the income springs, and the variation in conditions from district to district. No exhaustive statistical inquiry into this income has ever been made throughout Tuscany; but careful investigations restricted to typical areas indicate that the position of the *mezzaiuolo* before the war was superior to that of the agricultural labourer. The annual income of the latter varied from 600 lire to 200; while the average income of the *mezzaiuolo*, if one can depend upon the scrupulous calculations of Bruttini, Guicciardini, Faiana and Savellini,[1] would stand at about 700 lire. To this very definite superiority of income were added other advantages: *mezzadria* was the one contract which secured to the rural worker continuity of employment throughout the year, relative security from the effects of crises, a fixed residence, and the very real advantage of family co-operation. The *mezzaiuolo* might well reply to the blandishments of the agitator in the words of his ancient, much-quoted proverb:

> "Who turns aside from paths of yore
> Knows what's behind—not what's before."

Then the war came, and Wisdom hid her face, even from peasants. The *contadini* of Tuscany crouched in the trenches side by side with labourers from the towns, and could not fail to catch something of the cosmopolitan proletarian enthusiasm which had failed to reach them in their hill terraces. The end of the war found the advanced parties far stronger than they had ever been before, so that the peasants, when they returned to their fields, were met by champions ready to organise them in a struggle for their "rights." The Socialists formed "red" unions of *mezzaiuoli;* supporters of the *partito popolare* formed "white" unions. The demands of the latter were far more radical than those of the former. While the Socialists calculated that an alteration of the bases of *mezzadria* was beyond the scope of practical politics, and contented themselves with pressing for rectifications of the contract in detail, the "white" unions showed a disposition to attack, if necessary, the very roots of the system. The vital thing in *mezzadria*, they declared (and it

[1] Analysed in Martini, *op. cit.*, p. 22 (and references).

would seem that they were sincere), was the association of labour and capital in the exploitation of the soil ; if, under the forms of *mezzadria*, capital was not playing its part, those forms must be altered, in order that the reality might be secured. Therefore, in their negotiations with the *Associazione Agraria Toscana* (the organisation of the proprietors), their demands continually expanded from questions of detail—remuneration for *opre*, payment for chemical manures, modification of the *disdetta*, and similar matters—till they fastened on the crucial question of technical direction of the *fattoria*. Was it tolerable that an ignorant proprietor should ruin his peasants and himself because he was incapable of practising scientific methods ? The " white " unions demanded, first : that *mezzaiuoli* should be at liberty to make their own improvements when the proprietor failed to give them a lead, that they should have compensation for this work when it was ended, and security of tenure while it was continuing. Then, complaining that local agreements were not being kept by the proprietors, and failing to secure a general agreement for all Tuscany, they went still further. If the proprietor was proved to have persistently neglected improvements—so ran their second, and fundamental claim—the peasant community itself must have the right to break free from the proprietor's control and to take over the estate in joint lease.[1]

This proposal, had it been carried, would for good or for ill have altered the whole basis of agricultural co-operation in Tuscany. Towards the end of 1920 negotiations definitely broke down, and in certain districts *mezzaiuoli* were stirred to imitate the example of the town workers who occupied the factories. The whole question was then referred to the Minister of Agriculture. The Minister appointed a committee to investigate and report. But committees move slowly, and Italian politics at times move very fast. Before anything definite was done, a new wind had arisen in Italy : soon it had blown politicians and union secretaries away from the Tuscan fields.

The forms of *mezzeria* are to-day what they have always been. The problem of the future remains as it was when Bettini Ricasoli first left Florence for Brolio : will the system adapt itself to the changed and changing economic conditions of Italy and Europe ? Brolio still flourishes in proof that it *can* do so ; scores of well-

[1] See *Atti dell' Academia Reale dei Georgofili*, *passim*, for these years. The point of view is that of the enlightened proprietors. For the point of view of the " white " unions, see especially M. A. Martini, *Le agitazioni dei mezzadri in Provincia di Firenze*, Firenze, 1921. Martini publishes the most important documents.

managed estates give a similar example, worth far more than all the pamphlets and all the disputations. No country other than Tuscany possesses a land system so perfectly adapted to conditions of the soil, so charged with history, so fruitful in co-operation and contentment. Political interference would have been premature in 1920 or 1921, and it may be doubted whether the *mezzaiuoli* would have gained much from the efforts of the union secretaries and the well-meaning meddlers who took up their cause during the turbulent years which followed the war. Perhaps the Tuscan peasantry may some day be compelled to seek similar aid from similar champions. That will depend upon the extent to which Tuscan landowners choose to pursue their own interest. The Ricasoli have proved by four generations of fruitful labour that the fortunes of the proprietor and of the peasant prosper together when *mezzadria* is maintained in a spirit of wise conservatism and strenuous progress.

W. K. HANCOCK

University of Adelaide.

"SCOTCH CATTLE" AND EARLY TRADE UNIONISM IN WALES

Nothing in the pages of history is more romantic than the history of the gradual self-organisation of labour. At one time organised with their employers in craft guilds, the workers were deprived of the benefits of association by the capitalisation of industry and the consequent diversity of interests which arose between the employers and their employees. The workers, thus cast adrift by the system which made them but mere hirelings, remained for centuries in a state of social chaos. Unscrupulous employers, who, often with the connivance of the Government, evaded the laws enacted in the interests of the workers, compelled the labouring classes, in the closing decades of the eighteenth century, to essay some attempts at organisation.

The element of success which attended their efforts so alarmed the employing classes that they induced the unreformed Parliament, which saw in the rapidly spreading combinations something more than economic organisations, to still further jeopardise the position of the artisan classes by passing, in 1799, the notorious Combination Laws, thereby making workers' associations illegal. A combination of circumstances made still more hazardous the economic position of the workers; for the enclosures, the Napoleonic wars, and the Corn Laws confronted them with problems of an ever-increasing supply of labour, falling wages, a rising price level, and a burden of taxation that was to go on increasing for many years. Combinations entered into for the purpose of defending or improving their economic status being illegal and punishable by imprisonment, the workers degenerated into slaves of the new wage-paying system.

In July 1806, five rope-makers in the employ of Messrs. Grove and Co., of Swansea, were committed to Cardiff gaol for three months for a conspiracy to raise wages.[1]

The invidious character of the class legislation of the unreformed Parliament, though it denounced as illegal the organisations of the most impotent members of the community, tolerated the formation of identical associations by the employing classes. In 1802 the ironmasters of South Wales had a powerful

[1] *The Cambrian*, July 18, 1806.

organisation which met quarterly to regulate the price of iron and the wages of the workmen. At first the members were required to pay an annual subscription of one guinea; but a later arrangement imposed on new members a fee of 10*s.* 6*d.*, the alleged cost of the bowl of punch imbibed by the ironmasters at each of their meetings.[1]

The workers persevered, however, with their unions; and though the laws enacted against them compelled them to meet surreptitiously, they created a series of undercurrents so strong as ultimately to throw the country into a state of appalling confusion. Squalid hovels and the necessity of sending their children to work in the mines and the factories helped to make the workers violent and subversive.

The system which permitted the employers to organise yet imprisoned the workers for doing likewise drove the workers to take the law into their own hands and to demonstrate by a campaign of terror the fatuity and futility of repressive measures. Secret societies were everywhere formed, and "Scotch Cattle" prevented miners taking strangers underground without the express sanction of the "lodges." Anyone sufficiently intrepid to ignore the decrees of the lodges received a warning which, if disregarded, was followed by a nocturnal visit from some neighbouring band of "Scotch Cattle." The transgressor's house and furniture was often destroyed, bodily injury inflicted, and sometimes even murder was resorted to by these gangs of ruffians. To prevent identification the "Scotch Cattle" not only blackened their faces and assumed disguises, but arranged that a transgressor in one district should be visited by a herd from another district. The terrorists were usually led by a "bull," the strongest and most pugnacious scoundrel in the herd, and heralded their approach by lowings and growlings. On arrival at the house of their unwilling host, they destroyed its contents with a thoroughness that was appalling. A victim who showed any signs of resistance or attempted to reason with them was immediately chastised. Thus in November 1834, murder was committed at Blackwood[2] in the name of the "Scotch Cattle."

The recurrence of scenes of wanton violence continued unchecked for many years. Numerous arrests were from time to time made, but seldom did convictions follow, the injured being fearful to give evidence lest the revenge of the "Scotch Cattle" should again fill their lives with terror and dismay. The impunity

[1] *History of the Iron, Steel and Tinplates Trades*, C. Wilkins (Merthyr, 1903), p. 67.
[2] *The Cambrian*, April 10, 1835.

with which they defied the law encouraged the ruffians to intimidate not only recalcitrant employers, but also members of the general community sufficiently indiscreet to denounce their barbarous activities.[1]

Repressive legislation having failed to crush the spirit of the rebellious workers, the Government, in 1824, decided to repeal the Combination Laws. Toleration was all that resulted from the 1824 Act, for though it was no longer a criminal offence for a worker to belong to a union, the union had no legal status in the law-courts. The strike was still a dangerous weapon to use, for every worker who arranged or assisted in the arrangement of a demonstration of this kind was still liable to transportation for conspiracy. In 1825 the Act of 1824 was revised, some of its concessions being withdrawn and others accorded in their stead. Still liable to punishment for conspiring to combine and in other ways hindering and obstructing the due course of industry, the workers perforce continued their secret activities. Strikes degenerated into riots which necessitated the intervention of the military and the shedding of blood.

Merthyr Tydvil, the centre of a district which gave employment to over 100,000 persons, became the storm centre of the workers. In September 1831, considerable ferment prevailed among the workers in the ironworks; for the firemen, miners, and colliers of Monmouthshire and Glamorganshire, cognisant of what had transpired in the north of England, formed themselves into clubs or lodges, the avowed objects of which were said to be mutual assistance when unemployed and vigorous resistance to the arbitrary demands of the employers for wage reductions. It was generally believed, however, that, in addition to such laudable objects as were publicly proclaimed, the workers' lodges had as an ulterior object the desire to so harass the employers as ultimately to place the virtual control of industry in their hands. As the employers had regulated wages without regard to the cost of living, so the workers proposed to control industry without regard to profits. Illegal oaths were said to be the bonds of union between the workers, a connecting link strongly deprecated by those who saw in the workers' lodges a fruitful cause of confusion, distrust, and dissatisfaction between employers and employed.

Coercion and violence were the weapons used by the workers

[1] In July 1834, the shop of Thomas Rees, of the Rock, in the parish of Bedwellty, was destroyed for his denunciation of the men who combined against their employers.

to persuade the hesitant to join the lodges. In the works and in the streets the refractory workers were persecuted by the unionists to the detriment of the employers and the employees. The handicap imposed on the employers by the schism among their workers determined them to contrive a plan of campaign which it was hoped would smash the union movement; members of the unions were to be discharged and their places filled from the large army of surplus labour. A bitter conflict ensued in which the "Scotch Cattle" again became prominent.

Some forty or fifty men employed by the Neath Abbey Iron Works having joined a "Union Club," the works agent served them with notices to quit. Unpleasant consequences were obviated by the immediate intervention of the principal proprietor, who, informed of the circumstances, invited his workmen to meet him to discuss dispassionately the advantages or disadvantages attaching to membership of the union clubs. Approximately 150 workers accepted the invitation. Mr. Price, having read the rules of the society to which the men had subscribed, proceeded to enumerate the several merits and demerits of the unions and to express his readiness to encourage and further any movement that had for its object the welfare of the workers. Several of the employees also addressed the meeting, some contending, in support of the unions, that combinations of workers by organising a strike fund would make labour less perishable and therefore, as far as bargaining strength was concerned, more on a par with capital. The meeting had lasted about an hour when it was determined to take a vote of the men present; those in favour of the union to move to the right and those against to the left; and it was said that everyone moved to the left. Mutual congratulations followed the interment of this union club at Neath. The same plan of settlement was adopted in October by the colliers employed at Mr. Coffin's collieries at Cwm Rhondda.

A more difficult task confronted the proprietors of works at Dowlais and Merthyr. After many petty moves had been made by both sides, the employers posted a notice to the effect that after September 24, 1831, none but non-union men would be employed. The men thereupon ceased work, approximately 2000 persons being affected at Dowlais alone. The proprietors anticipated a long struggle; and it was said that at Dowlais the employers had accumulated a stock of coke large enough to keep the furnaces in blast for nine months.[1]

[1] Several of the furnaces at the Plymouth and Dowlais works were blown out.

Though the depression in the iron trade caused that portion of the Aberdare Works formally managed by Messrs. Scale to close down, the workers continued to battle for their unions. Hunger is, however, in all struggles between labour and capital, a potent and relentless factor. By October many of the workers were in a parlous plight. Inadequately supported by the unions,[1] the workers were forced to solicit relief. On October 7, many of the Dowlais and Plymouth workers applied to the magistrates for an order on the Select Vestry, it having refused them relief on the grounds that they were voluntarily unemployed. The application was refused.

In November, large numbers of impoverished workers, deserted by the "Union Preacher" Twiss, renounced their unions and returned to work. The Plymouth workmen had decided to offer their labour to their employers on the 14th November, but were deterred by the intervention of large numbers of workmen from Cyfarthfa and Nantyglo. Thus while many returned to work, the more headstrong among the workers continued to suffer for their unions. In January 1832, hundreds of the workers at Merthyr were still out, and in consequence the magistrates were continuously employed removing families to their parishes of origin, chiefly Carmarthenshire, Pembrokeshire, and Cardiganshire. It was estimated that the cost of removals from the parish of Merthyr since the union club agitation commenced exceeded £500.

It has been said that illegal oaths formed the bond of union between the members of the newly-formed lodges. No objection was taken to the body of rules openly published, save perhaps rules 13 and 14, which constituted the workers' Committee and Inspectors, the sole and irrevocable judges of the wage rates to be paid by the men's employers. The secret oaths, however, were roundly denounced. The following is an example of them:

"Prepare, prepare, for dust thou art, and unto dust shalt thou return.

"So, therefore, fall down on your knees, and lay your right hand on this Holy Book, and your left hand on your heart, and say after me this solemn obligation—

"Question: What is your name?—A. B.

"Is it of your free will that you come here to join this Friendly Society of Coal Mining?—I do.

"1st. I most solemnly and sincerely swear, with my hand

[1] The Unions paid the workers from 4*s*. 6*d*. to 5*s*. per week.

on the Holy Book and on my bended knees, that I never will tell who gives me this obligation, or these witnesses present, as long as I live.

"So help me God.

"2nd. I will enter this Society and will pay according to the rules, or as the Committee thinks proper, or as far as lies in my power.

"So help me God.

"3rd. I never will instruct any person into the art of coal mining, tunnelling, or boring, or engineering, or any other department of my work, except an obliged brother, or brothers, or an apprentice.

"So help me God.

"4th. I will never work any work where an obligated brother has unjustly been enforced off, or standing up for his price, or in defence of his trade.

"So help me God.

"5th. I will never take any more work than I can do myself in one pay, except necessity require me to do so; and if I do, I will employ none but an obligated brother, and will pay him according to the master's price, or according to his work.

"So help me God.

"6th. I will never leave my work, to be supported by this Society, without first acquainting the Committee, and will pay my share down justly and truly, and will act accordingly.

"So help me God.

"7th. I will never injure an obligated brother, or anything belonging to him, before I acquaint him of his foreseen danger.

"So help me God.

"8th. I will never in a boasting manner make known how much money I can get, or in how short a time.

"So help me God.

"9th. I will never make known any signs, tokens, passwords, or guess or write them on stone, sand, wood, tin, lead, or anything visible or invisible to the eye.

"So help me God.

"10th. I never will make these obligations known to either master, manager, or under-looker, over-looker, book-keeper, or any person, except to a legal obligated brother.

"So help me God.

"Numbers, 30th chapter, 2nd verse; Deut., 23rd chapter, 21st, 22nd, and 23rd verses." [1]

In Denbighshire and Flintshire, where the average wage was 8*s.* to 9*s.* per week, the colliers were much distressed by the fluctuations that recurred in their industry. In January 1831, a threatened renewal of the conflict between the masters and themselves led the colliers in the Ruabon district to organise a "Combination Fund" on the plan of and in conjunction with similar organisations in Lancashire.

The agitation for Parliamentary Reform inspired the workers, oppressed by recurring trade depressions, heavy taxation, the laws against trade unions, and the fluctuations of mismanaged currency, to abandon economic controversies and to divert their energies to securing such a reform of the House of Commons as would lead to an amelioration of the conditions under which they lived and worked. Politics were embraced simply because the workers were persuaded that their economic emancipation could only be achieved through a direct representation of their interests in the House of Commons. With characteristic fervour they participated in the agitation for reform and contributed in no small measure to its ultimate success. But the provisions of the Reform Act disillusioned the aggrieved workers, who once again reverted to their trade unions and the secret associations of the "Scotch Cattle." The country was again convulsed by the atrocities perpetrated by gangs of ruffians.

In February and March 1832, the districts round and about the Nantyglo, Blaina, and Coalbrook Vale ironworks were the scenes of violence and the destruction of property. Approximately one month before the Anti-Truck Act became effective, Messrs. Russell and Brown, the proprietors of the Blaina Works, proposed to their employees a wage reduction of from 5 per cent. to 6 per cent., and a simultaneous reduction of from 10 per cent. to 15 per cent. in the price of provisions at the company shop. These offers, supplemented by a proposal to make advances in cash two or three times a week or oftener if desired, were accepted by the men, some of whom returned to work. The majority, however, intimidated by the workers in other areas, refrained from entering the levels. At a place called the Cornish Pit an assembled throng of workers were ordered by their leaders to turn their coats and blacken their faces preparatory to an attack on the cottages of two marked men. On arrival at the cottages,

[1] *On the Oaths Taken in the Union Club.* By a Looker-on. (Newport, 1831.)

" headed by a man blowing a horn," they destroyed the furniture and savaged the men " in a most brutal manner." Mr. Brown, his two sons, nephew, and agent, who sallied forth armed to meet the nocturnal visitors, failed to recognise any of them, so complete was their disguise.

On the following day the Rev. William Powell and F. H. Williams, Esq., proceeded to Blaina to swear in special constables, while Messrs. Russell and Brown offered a reward of £50 to anyone furnishing such information as would lead to the apprehension of any of the offenders. The Secretary of State for the Home Department, informed of the disturbance, offered an additional reward of £100, " with the promise of a free pardon to an accomplice." Retribution soon overtook the malefactors; for a confederate of the 17th, who had returned to work the following morning, was so severely chastised by his former accomplices that he informed against five of them, who, apprehended, were subsequently committed to take their trial at the impending assizes.

Though the victims of terrorism evinced an increasing readiness to testify against the wrongdoers, the " Scotch Cattle " persisted in their nocturnal exploits. So widespread did their activities become that it was not considered safe to leave a house after dark. " No person can travel from Risca to Tredegar without shuddering at the work of violent and wanton devastation that presents itself to the eye," wrote a contemporary.[1] In November 1834, the Independent Order of Oddfellows at Tredegar passed resolutions designed to prevent their society " being contaminated by fellowship with any of these scoundrels "; [2] but so treacherous were the times and so widespread the ramifications of the clandestine " Scotch Cattle," that a worker who had appended his signature to the resolutions received the dread warning of the " Scotch Cattle."

While the young and unruly members of the working classes were inspiring the community with terror, the more rational among the workers were persevering with their unions and enduring the tribulations so commonly the lot of pioneers. Thus the workers employed by C. H. Leigh, at Pontypool, who had subscribed to a trade union, were instantly dismissed, while the unionist employees of Messrs. Crawshay, Merthyr, were informed that unless they forthwith seceded from their unions the furnaces would be blown out.[3] This attitude of the employers became

[1] *Monmouthshire Merlin*, July 26, 1834. [2] *Ibid.*, November 15, 1834.
[3] *Ibid.*, July 26, 1834.

general, for they were determined to make yet another attempt to crush incipient trade unionism. In pursuance of this determination the ironmasters requested the workers to sign a declaration renouncing all "connection, direct or indirect, with every club or union not sanctioned by the constitutional laws of the realm."[1] A fierce resistance to this demand was made by the workers. The furnaces at Blaenavon and Hirwain were blown out and the iron industry practically brought to a standstill. The proprietors of the Varteg Iron Works, apprehensive lest a mob attack should be made on the firemen who had signed the declaration, requisitioned a considerable body of military. Fortunately their services were not required, for the struggle was of brief duration and not marked by scenes reminiscent of Merthyr in 1831. The workmen at Blaenavon signed the declaration in July, a lead immediately followed by the workers at other places.

The "Scotch Cattle," however, continued their activities throughout 1835, though their immunity from arrest was becoming increasingly jeopardised. Judges and magistrates inflicted upon those who were apprehended the most severe sentences in the hope that such punishments might serve as warnings to others. In April 1835, Edward Morgan was hanged at Monmouth for the murder of Joan Thomas, at Blackwood; John James and William Jenkins for their connection with the outrage at the Rock were also condemned to death, but were subsequently reprieved and transported for life.[2]

With the advent of the Chartists the discontented, dissatisfied, distressed and restless workers transferred their affections from "Scotch Cattle" and union clubs to the lodges of the Chartists, persuaded that, by supporting the agitation for a parliamentary reform more radical than that of 1832, they might materially benefit themselves. Once again politics seemed to them to be a lever to improve their economic status.

E. J. JONES

[1] *Monmouthshire Merlin*, August 2, 1834. [2] *The Cambrian*, April 10, 1835.

THE LONDON CHEESEMONGERS OF THE EIGHTEENTH CENTURY

Cheese and butter form large elements of the dietary of the modern population, but throughout the eighteenth century they were even more important than they are to-day, and the large quantities of these products, which were handled by the London cheesemongers of the time, are explicable only in this light.

Although we have little to go upon in the way of direct evidence, there is available from the contemporary writers a sufficient guide to the quantities eaten, which remained large even at the end of the century, when the habits of the people were slowly being modified. In 1783 it was within "the compass of no very aged man's recollection, when barley bread, with milk and cheese, was the general food of the poor": [1] and it should be remembered that "the poor" in the eighteenth century was a general term used to cover the whole of the working class. Cheese formed a solid proportion of the diet of workhouses, the much-praised house at Nacton in Suffolk serving it with supper on seven days of the week and for breakfast on Sunday,[2] while the aged pensioners at Greenwich Hospital consumed $2\frac{1}{4}$ lbs. apiece during a week in 1802,[3] and a poor labourer and his wife, without children, are said to have eaten a pound a week each in 1808.[4]

Given these conditions, it is not difficult to imagine that the cheesemongers of the metropolis were a wealthy and powerful body, and when to the figures for the average consumption of such individuals is added the weight of figures showing the quantities dealt in by these merchants, the opinion is more than confirmed. In the early years of the century it was estimated that the "County of Chester and its adjacent lands" sent "near 30,000 tons of Cheese to *London* and all other places." [5] Some quarter of a century later, the cheesemongers themselves represented their dealings as being of the following order:

[1] *Useful and Practical Observations on Agriculture*, by a Clergyman, p. 217.

[2] *Considerations on the Present State of the Poor in Great Britain . . .* 1773, p. 49.

[3] *Essays on Miscellaneous Subjects*, Sir John Sinclair, Bt., p. 467.

[4] *On the Poor Laws of England*, Rev. Jas. Willis, Vicar of Sopley (at end).

[5] *The Compleat English Tradesman*, Daniel Defoe, 2nd ed. (?), 1727, Vol. II. Pt. II. p. 31. This is probably an exaggerated estimate.

> Butter made in Norfolk, Isle of Ely and part of Lincs. and sent to Cambridge by water, thence by land to London weekly is 90,000 firkins (approx.) = 2,250 tons.
>
> Quantities of cheese annually brought to London from Warwick, Leicester, Derby and Stafford by land carriage is about 500 tons. From Gloucester, Wiltshire and Berkshire by land annually 2,000 tons.

It may perhaps be interpolated here that Ernle says, with what authority he does not state, the "Gloucestershire cheesemakers sent their cheese to London down the Thames from Lechlade." [1] The statement is probably based upon Defoe.

> Essex, Hertford, part of Sussex, part of Kent, Bedford and Buckingham are supplied from London with 2,000 tons annually (of cheese and salt butter).[2]

These figures are contained in a petition of the several traders . . . being dealers in butter and cheese, within the cities of London and Westminster against the provisions of a Bill, then pending in the House, for limiting the number of horses that might be harnessed to the wagons of the time, a measure which passed into law, with only slight modifications, in spite of the power and wealth of the cheesemongers.

This petition, showing as it does joint action by the cheesemongers, has been accepted as part of the evidence adduced to show that the cheesemongers of the metropolis had formed a combine, or "club" as it was called, controlled the better part of the supplies, and arranged prices,[3] but the most firm foundation for this belief is an explicit statement made by one Mr. Wimpey, a writer on agricultural subjects, in 1770, and it is in connection with the large supplies obtained from Cheshire that he makes the accusation. He says, "The most considerable cheesemongers in London have formed themselves into a club. They are owners of about 16 ships, which are employed between London, Chester and Liverpool. They employ these Ships chiefly in bringing up Cheese to London. They have factors in Cheshire who buy up the Cheese for them and lodge it in their Warehouses at Chester. At their weekly Meetings they settle what Quantities each shall have brought up to Market. By this Means the Market is fed in such a Manner, that they command whatever price they please." [4]

[1] *English Farming Past and Present*, 1922, p. 276.
[2] *Journal of the House of Commons*, Vol. XXVI., 31st May, 1751, p. 273.
[3] *The Middleman in English Business*, R. B. Westerfield, 1915, p. 208.
[4] *Thoughts upon Interesting Subjects*, pp. 39 and 40.

Another grievance is that they will not suffer individual action, "intimidating," by means we can readily envisage, such rash persons as dared it, and of course, because they went North light, the ships could carry freight that way at cut rates, thus further consolidating their monopoly, which was, in the opinion of the day, a scandal and a wicked means of oppressing the consumer, although, if the description, which was repeated verbatim two years later by an anonymous writer,[1] was exact, it probably secured a more regular supply than would otherwise have been available.

The Cheshire cheese trade seems to have been the largest bulk of any branch, judging from the figures given above, and this is not surprising, because "there is reason for believing that cheese has been made in Cheshire for at least 700 years," [2] and it is said that it was so good when the Countess Constance of Chester had a dairy farm in the county, that she presented three cheeses to the Archbishop of Canterbury.[3]

Be that as it may, the trade between the county and London was sufficiently large at the end of the seventeenth century to need regulation by an Act of Parliament designed to prevent fraudulent packing when the goods were being shipped.[4] Overlookers were appointed whose duty it was to see that short weight was not consigned, but this was not thought necessary in the case of the London cheesemongers, "who send their own vessels to Chester for their own goods." Evidently the trade and its methods were stabilised at that date, and the procedure remained the same during the whole of the century.[5]

In 1692 the cheesemongers became involved in a dispute with the Liverpool authorities. A good deal of cheese was shipped from this port, and the authorities of the town demanded from the shippers the town dues on their wares, but the shippers claimed exception from the dues under charter. The dispute lasted until 1700, when arbitrators were appointed, with what result is doubtful. Throughout the earlier documents the defendants (if they may be called so) are cited as "the Cheesemongers of London," as though they were a guild or other corporate body, and this reading seems to have been accepted by Westerfield, but

[1] *A View of Real Grievances with Remedies*, 1772, pp. 274 ff.

[2] "A Detailed Account of the Making of Cheshire Cheese," *R.A.S.E. Journal*, Vol. VI., 1845, p. 102.

[3] *Ibid.* Footnote citing Bell's *Weekly Messenger*, Feb. 22, 1841.

[4] 4 William and Mary, c. 7. sec. 7 and 8.

[5] *Annals of Agriculture*, Vol. XVII. (1792), p. 47 ff. *County Report on Cheshire*, Henry Holland, 1808, p. 315.

the document of 1700 cites them as "Nath[l.] and others, Cheesemongers of London," which may be taken to show that they were not a combine, but were merely cited as the individuals concerned.[1]

That the cheesemongers may have lost the decision is shown by their action in 1709, when they opposed a Bill for building a dock at Liverpool because they would not be able to use it. The Bill, however, passed in spite of their opposition, and a loan of £6,000 was authorised for the purpose.[2] This attempt is again brought in to support their action as a combine, and certainly shows that upon occasion they were capable of concerted action.

During the eighteenth century the cost of living, as we should say, was rising, and since the reasons were not too well understood at the time, complaints were rife. All sorts of improbable people are accused of combination for the purpose of bleeding the consumer, amongst whom the farmers, an unlikely class, figure prominently, as well as the graziers and others. Since the business of dealing in cheese and butter had developed into such a routine as the available documents describe, there is no reason why the cheesemongers should be exempt from the accusation, possibly with more justice than some others.

In the middle of the century it was somewhat vaguely said that "when hitherto these commodities (butter and cheese) were brought to markets, the entering into private contracts for them was prevented; now being removed into factors hands, from out of the reach and out of the sight of the people who have a natural right to purchase them equitably"; [3] but this method of dealing in these commodities was well established by the end of the seventeenth century, as we have seen, and it continued for at least a hundred years, although it may have been to the disadvantage of the farmer, who was not always willing to hold the goods until the factor was ready to accept delivery and weigh the cheese, because of the loss of weight involved in keeping.[4]

However the organisation of the trade may have affected the farmer, if it was so concrete as described by Mr. Wimpey, it probably enabled the rapidly growing population of London (1700, 674,350; 1801, 900,000; 1811, 1,050,000)[5] to obtain its supplies of butter and cheese with regularity, and with little other

[1] *Selections from the Municipal Archives and Records of Liverpool*, J. A. Picton, 1883, Vol. I. p. 300 ff.

[2] *Ibid.*, Vol. II. p. 48.

[3] *Considerations on the present high prices of provisions . . .* by a West-Country Maltster, 1764, p. 13.

[4] *County Report on Chester*, Thomas Wedge, 1794, p. 61.

[5] Census, 1811, App., p. 199.

fluctuation in price than the natural increase which was affecting all commodities at the time. A measure of the rate of increase in price in thirty years after the middle of the century is given by the prices at the Victualling Office in London : [1]

			Butter.	Cheese.
			d.	*d.*
Average of five years	beginning	1750	$4\frac{3}{4}$	$2\frac{3}{4}$
,, ,,	,,	1760	$5\frac{1}{2}$	$2\frac{3}{4}$
,, ,,	,,	1770	$6\frac{1}{2}$	$3\frac{1}{8}$
,, ,,	,,	1780	$6\frac{1}{2}$	4

Wages were slightly on the increase, but they did not rise so rapidly as the cost of living, so hardship was endured by all the "labouring poor," as is constantly emphasised in the literature of the time, and these rises in the short space of thirty years would obviously be felt in an age when poor men ate cheese for hunger, rich men for digestion, as Fuller put it some centuries before.

But in spite of the detailed and specific accusation of Mr. Wimpey, and the evidence of concerted action in other directions, the clear-cut, almost modern type of combine or monopoly does not seem to be entirely substantiated. It may have been true that the cheesemongers had formed a club. All sorts of people did in the eighteenth century. The Two-penny club, the Ugly Club, the Sighing Club, the Fringe Glove Club and the Everlasting Club are but a few specimens of these mentioned by the *Spectator*. The result of the forming of a Cheesemongers Club may certainly have been in effect to give a monopoly to a number of the more wealthy dealers, but a too ready acceptance of what is after all a single statement, substantiated only by indirect evidence from other sources, may be doing a grave injustice to a body of men who were only following the traditional, well-known and well-developed practice of their business.

It is true that there is every evidence of concerted action at the beginning of the period, but that may have been because the persons engaged in the trade were cited together, and would obviously have similar interests to protect. They would also doubtless be well acquainted with one another. Again, they took joint action in opposing the Bill regulating road traffic in 1751, while the effect of their club may have been to give them the power to take concerted action in controlling supplies and prices, but that is certainly as far as the evidence permits one to go.

G. E. FUSSELL

[1] *Annals of Agriculture*, Vol. VIII. (1787), p. 432.

A FURTHER NOTE ON LABOUR EXCHANGES IN THE SEVENTEENTH CENTURY

Considerable light has been thrown upon the question of Labour Exchanges, instituted or proposed during the seventeenth century, by Sir William Beveridge's article in the Economic Journal for September 1914, with its correction, and by Mr. Philip Belasco's paper in the Journal (Economic History Supplement) of May 1927. The former related the facts as known of an Office of Adresses and Encounters, suggested by Henry Robinson in 1650 and traceable to a French origin; while the latter recorded proposals made to Parliament in 1660 by a Quaker, T. Lawson, for a Poor Man's Office, which were the outcome of a purely English movement. It would seem, however, that no one has hitherto noticed, or at any rate thought worthy of record, several other Offices having employment registry duties, proposed or established in the same quarter-century as the Robinson and Lawson suggestions, viz. 1635–60. One of these Offices seems to have preceded Robinson's by nearly thirteen years, and was probably largely derived from the same French source. Apart from any question of chronological precedence, however, the records of the Offices, taken together, are interesting in another sense, in that they appear to justify the conclusion that Robinson's Office of Adresses was not only set up, but was for some years in actual operation.

In December 1637, Letters Patent [1] were granted by Charles I to a " Captayne Robert Innes (or Innis), his executors, administrators, and assignes," in the form of an " Indenture of Lease," to set up in the Cities of London and Westminster and their suburbs an " Office of Intelligence," " the like whereof hath beene seene in Venice, Constantinople, and is now in use in the city of Paris in Fraunce " : while among the Thomason Tracts there are also two documents,[2] both of May 1657, the one announcing the opening of an " Office of Publick Advice," with branches in London, Westminster and Southwark, and the other a hasty rejoinder published by an Oliver Williams, who claimed to be an " assigne " (possibly an executor) of Innes,

[1] Public Record Office : Patent Roll (Chancery) 13 Chas. I, Part 24 (Roll No. 2773).

[2] British Museum : Thomason Tracts, 669, f. 20, Nos. 59 and 57.

against the carrying on of any such Offices, in view of his acquired monopoly.

The executive clause of Innes' patent of 1637 reads as follows:—"We doe hereby for us, our heires, and successors, erect, create, and make an Office to be and to be called an Office of Intelligence for the providing of masters and mistresses for any kind of servant, male or female, and for all sorts of servants for such masters and mistresses where the said servants may att anie tyme enter their names with their respective qualities for their accomodation and preferment."

The further duties vested in the Office were stated to be the recovery of lost property, the tracing of husbands abroad whose wives had had no recent news of them, the "bringing home of lost children, the discovery of murthers and roberies, and lastly of all for bargaines and intelligences of what kinde soever."

The grant was clearly intended to afford Innes the sole prerogative of establishing such Offices "within our citty of London and the liberties thereof and 3 miles distant from our citty and every side thereof." After a formal reservation whereunder the Crown has the right of appointing the administrators of the Offices, the Patent proceeds: "we doe hereby ordeyne and appoint that the said officer or officers . . . and none other person or persons whomsoever . . . shall have the entring of the names and qualities of all kindes of servants . . . And likewise of all masters and mistresses and their place and places of habitation. . . ." The grant was to hold good for forty-one years, and any prescribed scale of payments for services rendered was expressly forbidden, "which said Office the said Captayne humbly offereth to execute without any charge unto us or any of our subjects but that they think fit of their voluntary good will, and finde that the said Captayne may meritt." The Office of Adresses, if established by Robinson, was therefore not only, as Sir William Beveridge describes it, a naked plagiarism of a continental prototype, but apparently also an infringement—unwitting maybe—of the Royal Patent granted to Innes, both from the point of view of its actual institution and the levying of specified fees. Robinson seems to have been unconscious that he had been forestalled by Innes, for in his pamphlet we read, "There is more than a seeming want unto the perfection of humane society, that as yet there never was any publique place appointed which might have served as a Treasury, or Abridgment of all Accommodations desirable."

No information has been discovered as to the date of institu-

tion, duration or precise objects of the Offices established in Venice and Constantinople, though the wording of the Letters Patent of 1637 would seem to indicate that they had ceased to exist at that date. It seems clear, however, that Captain Innes in his travels must have become acquainted with the Office of Théophraste Renaudot, and have used it, as undoubtedly Henry Robinson did, as a general model for his own. In both, the Labour Registry duties hold the principal place: be it noted, however, that the secondary functions of Innes' Office as detailed above differ in particulars from those ascribed by Gilles de la Tourette to the "Office d'Adresse et de Rencontre."

It is not known how long the Office of Intelligence functioned under Innes' own administration; but it seems reasonable to assume that he would not have gone to the trouble (and the heavy expense) of securing Letters Patent without making use of his prerogative.

Excepting Robinson's, research shows that the next Office established, with the duties of bringing together workman and employer, was an "Office of Publick Advice" described in a pamphlet printed by Thos. Newcomb and published on May 14, 1657. This proclaims that "the said undertakers have erected several Offices or Places, to any of which all persons whatsoever may repair, there to Enter in the Register Books of the said Places respectively, the Occasions they have to dispose of any of the Things hereafter mentioned: which being thus Entred, the Undertakers will weekly put forth and publish a Book of Intelligence in Print wherein all the particular Occasions by them so entred as aforesaid shall be methodically set down and so made known to all the Nation; which Book shall be publicly sold every Tuesday morning at every stationers shop." The addresses are given of eight such branches in the Cities of London and Westminster and in Southwark, which are declared open for the receipt of particulars as from the date of the pamphlet: the first issue of the "Gazette" was promised for Tuesday, May 26.

It is only possible to give a few of the more pertinent extracts from the table of subjects with which the Office claimed to deal; the respective charges were for a month's insertions, and further publication could be arranged at similar rates:

Of all such Masters, or Captains, Pilots, Masters Mates, Pursers, Boat Swains, Gunners, Carpenters, Shipwrights, Surgeons, etc. that want imployment . . . . . Six Shillings.

Of any other seamen of what rank soever that desire to be imployed	Three Shillings.
Of Professor of Sciences, Teachers of languages, of Tutors or Governors for Noblemen or Gentlemen's children. Of School-Masters or School-Mistresses of the better sort . . . of Stewards, Bailiffs of Manors, Secretaries, Gentlemen Ushers, etc. Of Book-keepers, Cash-keepers to Merchants or others, of Clerks of Counsellors, Justices of Peace, Attorneys, Solicitors, Scriveners, Brewers, Woodmongers, etc. . . .	Ten Shillings.
Of Petti-School-Masters and School-Mistresses, Serving-men or Serving-women, of all sorts and degrees, Journeymen, Workmen, etc. of all Professions whatever . .	Four Shillings.

In addition the Office would give notice of movements of ships or vessels, time-tables of stage coaches, carriers and horses available for overseas journeys, lands, houses and lodgings for sale, letting or mortgage, money to be put out at interest, wares, merchandise or commodities, wholesale and retail, to be bought or sold, timber for sale, books to be printed, straying cattle and runaway apprentices.

Information is given in the pamphlet concerning the hours of opening of the various branches, and the manner of making applications, obtaining receipts, and notifying to the Office successful answers to advertisements. The methods of business adopted resembled those of a modern newspaper which specialises in advertising situations vacant and wanted, etc., rather than those of a Labour Exchange as now known. Doubtless, however, the Register Books and the Books of Intelligence could be adapted to the uses now fulfilled by the circulation of vacancies in a modern Employment Exchange system. Whether an Office of this kind would attract much custom from the ordinary servant or workman is very much open to question. The fees, as compared with the sixpence charged by Robinson, seem abnormally heavy.

No information has been discovered as to how long the Office of Publick Advice continued in being; but on the 26th of the very same month (May 1657), a certain Oliver Williams, who is elsewhere mentioned in connection with a claim to control the Ballasting Office,[1] retorted to Newcomb's pamphlet with

[1] Public Record Office: Day's Proceedings of the Council for 20th Nov. 1656, 19th and 24th Feb. 1656/7, and 23rd July 1657.

> " A Prohibition to all persons who have set up any Offices called by the names of Addresses, Publique Advice or Intelligence within the Cities of London and Westminster, the Borough of Southwark and three miles about the same."

This injunction was based upon the Letters Patent issued to Innes in 1637, " whereas the late King Charles the 20 day of December in the 13 year of his Raign did for himself, his Heir and Successors, grant one Indenture of Lease under the Great Seal of England to Captain Robert Innes, his Executors, Administrators and Assignes, for the term of 41 years, of an Office then called the Intelligence Office, of all kinds of Intelligence whatsoever, of all Bargaines, of things lost, or found, for helping Masters and Mistresses to Servants and Servants to Services." It goes on to protest that, " notwithstanding the said Prohibition in the said Grant is still in force for divers yeares yet to come," " several persons have set up such Offices by the name of Offices of Addresses, and lately by the name of Office of Publick Advice, as appeareth in a printed paper printed by one Mr. Thomas Newcomb : " " wherein (contrary to law) several persons have assumed power to themselves of imposing rates upon the several particulars therein set forth and expressed; whereas in the Lease granted to the said Captain Robert Innes, it is left to the voluntary disposition of the persons addressing themselves to the said Office what to give." Williams claimed that the original patent still held good, under saving clauses to two general Ordinances of 29th January 1648 and 26th December 1653; and apparently went to the trouble of securing a copy of the Letters, in order to establish his title and right; " the said Grant is now exemplified under the Great Seal of England in the name of His Highnesse the Lord Protector at the request of Oliver Williams, Assigne to the said Captain Robert Innes."

The Prohibition thereupon proceeds to announce that the author proposes to institute his Office of Intelligence " with all possible speed," and utters a *caveat* against any other person or persons intending to set up, or continue, or serve in such an Office under any designation whatever, without first obtaining his written authority.

The mention in Williams' pamphlet of " Offices of Addresses " is strong circumstantial evidence that Robinson's Office had, for a time at any rate, been actively operating, even if it were not still open in 1657. The plural here may indicate that Robinson, too, had his imitators; but if there were other attempts during

the period to establish agencies under that title, it is curious that no mention of them can be traced in the meticulously complete Thomason Tracts; for such agencies could hardly hope to succeed without self-advertisement. Perhaps, then, the use of the plural may be ascribed rather to a desire that the injunction should be comprehensive, than to the actual existence of other organisations of a like nature.

There is yet a further deduction which may be drawn from the fact that Williams' Prohibition appeared in May 1657. His acquisition of rights in the dormant Office of Intelligence must have been recent; otherwise it is inexplicable, in the light of his hurried rejoinder when the Office of Publick Advice was advertised, that he had not registered an earlier protest against the action of Robinson. Robinson must have been at least as formidable a competitor as the undertakers of the latter Office, who, unless they are the petty shopkeepers on whose premises the branch Offices were established, are not even mentioned in the announcement. But that Williams thought his possession a valuable one is evident, for he seems to have lost no time either in disposing of his rivals or in putting his privilege to practical use.

The above notes were compiled in the course of a review of a wider subject than that of the history of the Labour Exchange idea, but they are set forth separately as being of sufficient general interest and in the hope of stimulating further research into the genesis of an institution which now plays an important part in the industrial life of the modern State. It is evident that in England the Labour Exchange idea found expression in a document issued under the authority of the Crown as long ago as 1637.

FRANK A. NORMAN
L. GORDON LEE

SOME ACCOUNTS OF INDIVIDUAL HIGHLAND SPORTING ESTATES

The following tables were compiled from the private estate accounts of three Highland properties with grouse moors. For personal reasons their names cannot be given, but the writer can guarantee that the figures are absolutely genuine.

The three estates are situated in two straths, both very typical of the Central Highlands. In each of these straths there is cultivation along the floor of the valley upon either side of the river which winds about down the middle, and upon the flanks of the hills where soil, situation and other circumstances are favourable. The names of most of the existing farms are very old—there has been extraordinarily little change since the fourteenth century at least, as the Exchequer Rolls of Scotland prove, for one of the straths was held, at that time, directly of the Crown and the rental roll has survived. The actual land, however, that was under arable cultivation must have differed considerably. Before the introduction of drainage very much of the best land on the bottom of the straths can only have been fit for use as meadow-land, and the old line of cultivation was evidently carried along higher up the hillsides. Much of the land, however, that bears traces of ancient tillage was not permanently under crops, but was only occasionally cultivated according to the old Scots method of " outfield " husbandry.

A general outline of the ancient economy of the two straths may be of interest. They were occupied by the members of one of the larger clans and by those of its allied septs, and as the prosperity, even the existence, of the chief and his clansmen depended upon the fighting strength of the clan, the straths were densely crowded. As late as 1791, as the result of this old policy, the usual holding was said to be an oxgate (13 acres), but, judging from leases that happen to have survived, holdings of half an oxgate must have abounded. The farms were made up of an aggregation of these little holdings, but, in addition, there were also a certain number of cotters, mailers and such-like landless folk, who shared in the farm produce and grazing upon various terms. The people were extremely poor. All general accounts

of the Highlands seem to agree upon that, and in both of these straths there is an abundance of local tradition that bears this out. The well-known story that sometimes, in hard winters, the people had to bleed their cattle in order to subsist upon the blood mixed with a little meal and water, is vouched for as a local fact by many of the old people who have preserved the traditional lore of the strath, and heart-rending tales are told of the famines that followed the worst of the bad harvests. The chief of the clan and his principal duine-uassails were not dependent upon local supplies of corn and had farms upon the more fertile coast land. The importance of these laighland farms is proved by the steadiness of the policy of the whole line of chiefs in securing to themselves this source of supply, hanging on to the farms at all costs so far as they could, and, when some of them were lost, in obtaining heritable or leasehold possession of others.

Cattle, however, and not corn was the most valuable product of the straths. From the earliest dates that Exchequer Rolls go back to, the enormous export of hides and even beasts from the northern ports can be computed, and three lists of the possessions of Highland lairds in districts very close to our straths, that happen to survive from the fifteenth and sixteenth centuries, show that their main source of wealth lay in their great herds. There are many references to the cattle trade between the Highlands and the Lowlands in the seventeenth century. As Thomas Morer, one of the best observers of Scots life, writes: "The Highlanders are not without considerable quantities of corn, yet have not enough to satisfy their numbers, and therefore yearly come down with their cattle, of which they have greater plenty, and so traffic with the lowlanders for such proportions of oats and barley as their families or necessities call for." The development of the cattle trade with England after the Union and its effects upon Scots economic life is, of course, well known, and Adam Smith has pointed the moral. Our two straths had their small share in the movement. The site of the local "tryst" (market) and the droving roads are still pointed out. And the principal proprietor of the larger strath, writing at the end of the eighteenth century, notes that most of his rents were paid in money, when those in the comparatively advanced low-lying, coastwise, corn-growing districts were paid in kind, because, in the backward Highland strath, the people's resources were mainly dependent upon the sale of their beasts.

During the second half of the eighteenth century four factors began vitally to affect the social life of our straths. Firstly, with

the pacification of the Highlands, the old clan and feudal ideas died away, and those regarding the possession of land were consequently entirely changed—the "cash nexus" was, in fact, introduced. Secondly, with better means of communication with the south, and with the throwing open of the American Colonies to Scots enterprise, the people themselves began to better themselves by leaving the crowded farmsteads of the straths. This movement was numerically a small one, but I think it has persisted almost uninterruptedly down to the present day. Two writers, who visited our straths or the country very close to them before sheep-farming was introduced locally, noticed this drift of the population. Thirdly, by the very end of the eighteenth century, and right down to about the middle of the nineteenth century, the different proprietors began to enclose and delimit the joint holdings of the congeries of tenants who had previously occupied their farms. On the farms where the process can be traced out, it seems to have been a very gradual one. On estate A., for instance, the consolidation of the holdings into their present form took almost exactly fifty years. Undoubtedly such enclosures led to a reduction in the number of joint tenants, cotters, etc. who were attached to the farms, though it improved the circumstances of those who were left and led to a considerable increase in the number of local craftsmen that the people of the straths could afford to keep employed. The minister of one of the straths, in his contribution to the second Statistical Account, writes that these two developments had kept the number of inhabitants fairly constant. Fourthly, sheep-farming was introduced into the district in the last decade of the eighteenth century with the same disastrous results as those which it produced in other parts of the Highlands.

The increasing demand for mutton and wool which encouraged large-scale sheep-farming was the direct result of the Industrial Revolution in the south, but local factors also disposed the Highland laird or tacksmen to rear sheep instead of cattle, as soon as a sufficiently hardy breed of the former was introduced. In most parts of the Highlands only a small part of the hill country was suitable for grazing cattle in the summer. The stock was sent up to the shielings in the high-lying grassy glens and corries, but these favoured spots were few and far between—they can easily be identified to-day—and they could only be grazed between May and September. During the winter the problem of feeding the stock was worse. The natural grass of the Highlands is notoriously inferior either for making into hay or for using

as winter pasturage. In the days before sown hay and turnips, the cattle were fed in winter upon what they could pick off the stubbles, upon oat straw, and upon the worst of the unthreshed " outfield " corn. It is said that one beast in five died of starvation every winter, and it must be remembered that the cattle took five years to mature sufficiently to be sold as unfattened bullocks—they were, of course, never fattened for sale in the north. The sheep, on the other hand, were and are pastured over the greater part of the moors, and can be wintered with little artificial feeding in the more sheltered land of the glens and straths, but, in order to keep a full stock upon the high ground in summer, this sheltered grazing had to be supplied. Hence arose the " clearances " of the tenants who occupied these sheltered glens, which have left so deep a stain upon the proprietors of the north. Within our straths two very bad examples of " clearing " occurred, neither of them upon the three estates whose accounts I quote from, and, apart from these wholesale evictions, all over the straths, the introduction of sheep no doubt led to the abandonment of certain isolated farms and crofts. The movement had its ups and downs, but it held sway for more than sixty years. Then, in the 1860's, there came a sharp break in the price of wool and in the demand for the three-year-old hill mutton; rents began to fall, and sheep farms to lack tenants all over the Highlands (ref.: Appendix IV, Departmental Committee on Deer Forests, 1919). By that time, however, a new economic factor was playing its part in the Highlands.

Apart from certain deer forests belonging to the King and the greatest of the nobles, which had existed and been preserved so far back as written Scots history goes, little regard was paid to sporting rights. Travellers to the north of Scotland at the end of the eighteenth and the beginning of the nineteenth centuries seem to have shot anywhere they chose. A few years later it seems to have become usual for sportsmen to ask the proprietor's permission before shooting over his moors; about 1824 shooting in the Highlands was becoming popular, and hundreds of sportsmen were said to come up in the autumn, and, in some cases, rents were charged for grouse moors and deer forests. Nevertheless " the idea of deriving a regular income from the letting of shooting rights was still unfamiliar in the 'forties and 'fifties " (Report of the Departmental Committee on Deerstalking, 1919, p. 5). The estate named A. in the following tables was one of the earliest to be let in our straths. The rent that was charged is unfortunately not known, but the two guns came up *en garçon*,

lived in a " but and ben " cottage with one old woman to do for them, and needless to say they indulged in no shooting parties.

The decline in sheep-farms greatly stimulated the formation of deer forests and encouraged proprietors to let their land as grouse moors. Sheep and grouse are far more compatible than sheep and deer, but from the middle of the nineteenth century the grouse moor became increasingly important as a source of income, and the sheep that were pastured upon it tended to be really a by-product.

The following figures show the position that the grouse moors occupy in their owners' budgets. The figures represent averages taken over the years since the war.

A. 5,300 acres; of which 180 acres are arable, 100 acres have been planted, and the remaining 5,020 acres are moorland.

Income.		
Rents of farms	£215	
Rents of shootings and fishings	1,000	
		£1,215
Expenditure.		
Wages (keeper and yardman), salary, insurances, repairs (almost entirely to farm buildings and permanent improvements), and miscellaneous	£751	
Rates, taxes, share of minister's stipend	423	
		£1,174
Surplus		£41

The mansion house of A., which was let with the shooting and included in its rent, required at least £1,000 to be spent upon it to maintain the fabric and to bring it up to tenant's requirements.

B. 4,727 acres; of which 120 acres are arable, 126 acres are planted, and 4,481 acres are moorland.

Income.		
Rents of farms	£192	
Rents of shooting and fishing	1,500	
		£1,692
Expenditure.		
Salary, wages (keeper and gardener), insurances, repairs (almost entirely to farmsteadings and permanent improvements), etc.	£789	
Rates, taxes, share of stipend	657	
		£1,446
Surplus		£246

There is a new mansion house on B. completed since the war, which cost about £10,000. It is let with the shooting and is included in the rent.

C. 13,855 acres; of which 1,409 are arable, 446 planted, and 12,000 moorland.

Income.		
Rents of farms (Shooting unlet.)	£175	
Expenditure.		
Salary, wages, insurances, repairs, etc.	£1,668	
Rates, taxes, stipend	593	
		£2,261
Deficit		£2,086

The value of sporting rights also plays a very important part in the finances of the local authority. In the two parishes in which our straths are situated the local taxation on sporting rights represents nearer 75 per cent. than 50 per cent. of the total receipts, a wonderful contribution from land that was much of it entirely valueless before the end of the eighteenth century.

Grouse moors also give a considerable amount of employment to local people. It has been calculated that, acre by acre, sheep farms and deer forests give much the same amount of employment (Report on Deer Forests, p. 22). Grouse moors give a somewhat greater proportion of permanent employment than deer forests and a very much larger amount of seasonal work, for the modern fashion of shooting grouse is to " drive " the birds by a long line of beaters over the row of buts where the guns are concealed. In our straths there is so much demand for beaters during the six weeks or so of the shooting season that the tenants of the different moors have to arrange to drive upon different days, turn and turn about, in order to secure enough. By good fortune the Highland harvest is so late that this seasonal employment generally fits in well with the agricultural work of the year. The little Highland cart-horses are also hired out to carry the bag. The tenant of the moor marked A. in a good season will have to pay about £145 for such seasonal work and for two local lads who act as ghillies. In a bad season, when the weather interferes with the shooting, it is probably about £10 or £12 less. The beaters are paid from 6*s.* a day with food, a man and horse receives £1 a day. On A. there are generally two days' driving a week, but the beaters get work on neighbouring moors on the other days. Of course, in addition, the shooting parties bring a fair amount of money into the country in payment for dairy products, etc.

Unfortunately, however, grouse moors do nothing to stay the steady drift of the people away from the straths. The population

of the two parishes in 1793, at the very start of the sheep-farming movement, was 3,510. In 1861, about the time of the decline of sheep-farming, it was 2,572. In 1921 it was 1,576. The reasons for this decline are very complicated. The extinction of local craftsmen—weavers, coopers, masons, etc.—is the cause of the decline or total disappearance of several little groups of cottages. The rising standard of living of the people themselves has caused the amalgamation of six holdings into three on A. alone. The agricultural depression of the 'eighties caused a good deal of land to go out of cultivation, including a whole hill face on B. In the case of two or perhaps three rather isolated little holdings in A. and B. that cut into the moors, the interests of the grouse were probably directly responsible. The attractions of the towns have also played their parts in drawing the people away, and the very high cost of building certainly prevents many old cottages from being replaced or rehabilitated. The relative importance of these causes for depopulation are almost impossible to determine. It is, however, clear that the means of livelihood that shall restore the old population to the straths and glens and support them according to modern standards of living has yet to be discovered. It is humiliating that so large a part of our country should be dependent upon the luxury tastes of the rich people who rent Highland moors and forests, but were it not for these sporting tenants it is impossible to see how the proprietors could provide the steadings and permanent improvements that are essential to modern standards of agriculture, or how the local revenue for providing the customary social services could be raised.

I. F. Grant

FAMILY ENDOWMENT AND THE BIRTH-RATE IN THE EARLY NINETEENTH CENTURY

A Second Analysis

In a previous article in the Economic Journal (Supplement) of May 1927 we put forward the suggestion that Family Endowment schemes might be found to be associated with a falling rather than with a rising birth-rate. This seemed to follow from an investigation of the Poor Law relief schemes in operation over most of agricultural England between 1795 and 1833. What was most striking in our temporary results was the association of complete operation of Family Allowances with an extremely rapid increase in population, and a falling birth-rate between the years 1811 and 1821. It was difficult to see how a bonus on children should bring about a smaller production of them; but it seemed that this had actually been the case. This suggestion is not borne out by the more detailed examination we have since been able to make. But neither has any evidence come to light to support the argument that Family Allowances lead to an increased birth-rate. It is more probable that unless we can argue that a decreasing birth-rate leads to these allowances, they are not in any way associated with movements in the birth-rate.

The evidence in favour of the effect of Family Allowances in producing a decrease in the birth-rate in the early nineteenth century, is that they were associated with such a decrease between 1811 and 1831 over all England, in the agricultural areas concerned, and in the specific " notorious " parishes taken together. But if Table I is examined it will be seen that they were also associated with an increase from 1801 to 1811, and, too, that the same movement in figures can be traced for agricultural areas in England which never gave Family Allowances. The most obvious explanation of these figures is that whatever caused a fall in the birth-rate between 1811 and 1831, that factor was not Family Allowances. But it might still be true that a higher rate than would otherwise have been the case had resulted from this application. If we compare the two groups of counties, those that gave allowances, " Speenhamland " counties, and those which gave no allowances, " non-Speenhamland " counties, it will be seen that the rate for " Speenhamland " counties, while it follows the same

curve as that for " non-Speenhamland," is already higher in 1801, and remains higher by about the same amount throughout the period. But exactly the same relation holds in the later " control " period : counties that paid no allowance previously have a birth-rate consistently lower than that of counties which had paid allowances. For the factor which makes for this difference between the two groups, therefore, we should look among those which persisted throughout the nineteenth century, rather than among conditions peculiar to the earlier period. The necessary differentiating condition is, we think, found in the higher standard of living among agricultural workers common to the very counties (those in general of the North) which did not pay allowances. We shall suggest later a causal relation between the higher standard and the non-payment of allowances. Here it is only of interest to remark that much evidence has been accumulated to show that in modern times a higher standard of living is definitely correlated with a lower birth-rate. The figures given in the 1911 Census Report show that the number of children per 100 families varies from 190 in the highest (economic) group to 337 in the lowest. Without supposing any difference in the standard between Northumberland and, say, Bedfordshire, comparable with that which exists to-day between Harley Street physicians and dock labourers, it may well be that enough difference existed to account for a difference in the birth-rate of about 2 per mille. At the time when the Poor Law Commission was sitting, many of their correspondents wrote to point out the difference in standard between North and South. It certainly persisted into the period for which figures, and not opinions only, are available. The difference in birth-rates might also partly be due to the habit of " living-in " among northern servants for some years previous to acquiring a cottage, marriage being often deferred for this reason. If this explanation of the discrepancy in the figures for birth-rates of non-Speenhamland as compared with Speenhamland counties be sufficient, the only evidence that points to a system of Family Allowances being associated with an increased birth-rate disappears. Another explanation did occur to us, which has a dangerous corollary, but which it is difficult to disregard. Those counties for which the figures are lower happen to be not only those which had a higher standard for the agricultural worker, but were also the most " remote " for the purposes of the Registrar-General. It becomes possible that the difference indicated is one of efficiency of registration and not of actual numbers born at all. This looks probable from the fact

that the birth-rate for these remote areas shows no fall after 1870, when the figures for other areas show a universal fall. Possibly 1870 saw a stiffening up of registration, so that the fall in actual births was masked by a rise in registered births. We endeavoured to test the accuracy of the figures by comparing the discrepancy between the number of births registered and the number of deaths, and the estimated increase in population (Table IV) for the two groups. It will be seen that the discrepancy is consistently greater for the non-Speenhamland counties.

On an average this difference of about 4 per cent., if it really refers to the number of births not registered, is more than enough to account for the difference in the birth-rate. The conclusion that such a difference is only one of statistics and not of fact is upheld by the consideration that the average number of baptisms returned as unregistered between 1811 and 1822 is twice as great for the non-Speenhamland counties as for the other group (308 as compared with 153): in the case of Northumberland the number estimated as unregistered is about 700 out of between 4000 and 5000. In the first place it is probable that the habit of slackness in registration persisted under government as it had existed under ecclesiastical control. In the second place, at any rate the figures for the earlier period ought to be corrected, and, as we found it convenient to add about 3 per mille to the birth-rate in the admittedly inaccurate case of Northumberland, for purposes of averaging, so to the result of averaging the birth-rates of all the non-Speenhamland counties it might be fair to add one unit per annum. This would have the effect of lessening the difference between the rates for Speenhamland and non-Speenhamland counties during the period of payment of allowances, and so making it even more improbable that Family Endowment had any effect upon the birth-rate. The method could be applied to the figures for the later period also. But we have preferred to let that difference between numbers of births and numbers of deaths and survivals which Table IV shows to be greater in the case of non-Speenhamland counties be accounted for in terms of immigration and emigration, and to assume that the people responsible for sending in returns from parish registers estimated for numbers entered as accurately when these were large as when they were small. This preference in the case of the later figures is influenced by the complex nature of the discrepancies between columns 4 and 4*a* in Table IV, which are more likely to be due to population movements in connection with industrial development than inaccuracies in registration.

It remains to offer tentative suggestions on two points con-

nected with the main issue, though they are not exactly part of it. We remarked that one of the strangest correlations in vital statistics is that of a fall in the birth-rate at the same time that the increase in the population was most rapid. Table III is the result of an attempt to see whether a negative correlation could be traced. It is obvious that such a correlation could not be uniform, since we are now in a period when the population increases slowly and the birth-rate is also low. In so far as the correlation does hold in earlier years, we suggest that it is an outcome of changes in the composition of the population. If the combined effect of a higher birth-rate and a falling death-rate in the early years of the industrial revolution were to change the composition of the population, so as to make it consist of a greater proportion of young children and old people and a smaller of persons between the ages of fifteen and fifty-five, then the crude birth-rate would be likely to fall as a consequence. The continuation of the fall over twenty years is more difficult to explain by this means than its occurrence in one decade. But it still seems possible that it took twenty years for the increased proportion of child survivors to lead to an increased birth-rate.

The second point that we want to make as a side issue is the possibility of a close connection between wage-rates and the introduction of Family Endowment schemes. It is here we believe that the difference in the standard of living between the Speenhamland and the non-Speenhamland counties examined is significant. The re-introduction of allowance schemes in post-war Europe has usually been admittedly with intent to lessen the hardships of a fall in real wages. The notion of such a connection suggests many possibilities, from the rejection of the argument of the Hammonds that alternatives to Speenhamland were possible, to the formulation of a general law that adjustment of income to needs is inversely proportionate to income.

Apart from the many side-tracks that open out from any way through vital statistics, however, the net result of our examination of Family Allowances in the early nineteenth century, and their influence on the birth-rate, is a negative one. If it shows anything at all, it demonstrates a complete want of connection between the adjustment of needs to income and changes in the birth-rate. Such a result is not necessarily valueless, but if corroborated by research into modern data may, on the contrary, form an answer to an important objection to the introduction of a Family Endowment scheme into this country.

J. S. Blackmore
F. C. Mellonie

APPENDIX

Table I

Under "Speenhamland"

Place.	No. of Baptisms per 1000 Persons living.			
	1801.	1811.	1821.	1831.
England and Wales . . .		33·33	28·6	* 27·77
Agricultural counties of England taken together . . .	* 28·36	30·96	30·52	* 28·95
Agricultural counties which paid allowances	* 29·02	31·48	31·15	* 29·15
Agricultural counties which did not pay allowances . . .	* 27·05	29·92	29·26	* 28·52
Random selection of parishes which paid allowances, taken together .	28·43	36·02	26·36	30·09

* Worked out from table of "annual proportions"; not accurate, therefore.

Table II

After "Speenhamland"

Place.	No. of Births per 1000 Persons living.							
	1841.	1851.	1855.	1859.	1861.	1865.	1869.	1871.
England and Wales . . .	32·15	34·25	33·80	34·94	34·61	35·64	35·36	
Agricultural counties of England, taken together . . .	31·26	33·41	33·40	33·59	33·17	33·58	32·53	32·87
Agricultural counties which previously paid allowances . .	32·09	34·28	31·76	34·21	33·67	34·20	33·19	33·01
Agricultural counties which previously did not pay allowances .	29·63	31·65	31·42	32·88	32·16	32·36	31·36	32·58
† Random selection of parishes which previously paid allowances, taken together . . .	25·21	21·63	23·05	26·35		22·94	19·42	

† Actual results multiplied by $\frac{4}{5}$ to allow for falling off in ecclesiastic registration. This line represents an estimated *birth*-rate therefore.

Graph for Tables I and II showing Movements in Birth-rate, 1801–71, *for England and Wales, Agricultural Counties and Parishes.*

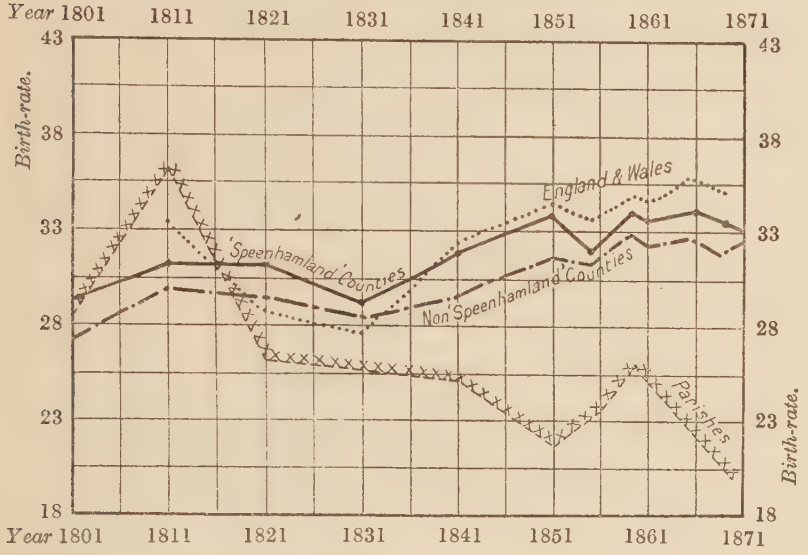

Table III

Comparison between percentage Increase of Population and the Birth-rate, 1801–51.

Place.	1801.	1811.		1821.		1831.		1841.		1851.	
	Birth-rate.	Increase per cent.	Birth-rate.	Increase per cent.	Birth-rate.	Increase per cent.	Birth-rate.	Increase per cent.	Birth-rate.	Increase per cent.	Birth-rate.
England and Wales.		14·00	33·33	18·06	28·6	15·80	27·77	14·27	32·15	12·65	34·25
Agricultural counties taken together .	28·36	11·6	30·96	14·3	30·52	10·3	28·95	10·2	31·26	11·3	33·41
Agricultural counties which paid allowances . .	29·02	10·4	31·48	15·3	31·15	11·5	29·15	10·7	32·09	8·8	34·28
Agricultural counties which did not pay allowances . .	27·05	9·9	29·92	15·5	29·26	8·8	28·52	11·3	29·63	8·5	31·65
Random selection of parishes which paid allowances, taken together .	28·43	1·9	36·02	22	26·36	3·1	30·09	11·3	25·21	3·1	21·63

Graph for Table III, showing Correlation of Rate of Increase of Population and Birth-rate.

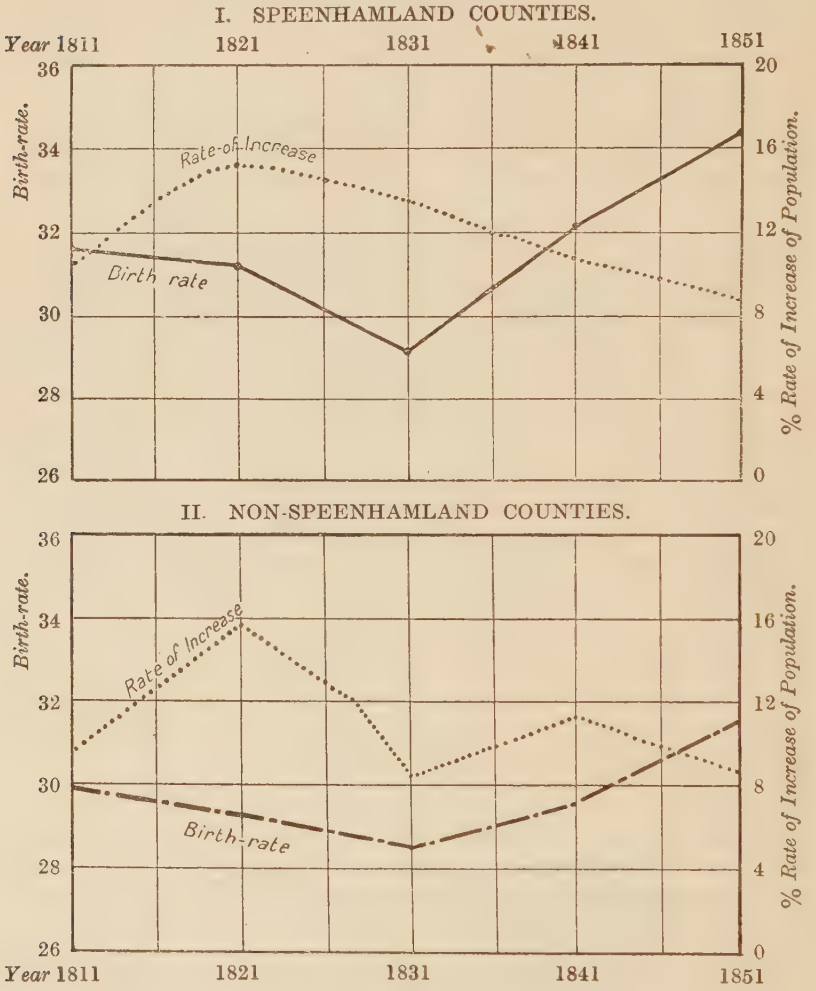

TABLE IV

Difference between number of Births and number of Deaths + number of Survivals. Comparison of Areas, 1841–71.

"Speenhamland" Counties.					Non-"Speenhamland" Counties.				
Years.	Deaths + Survivals.	Births.	Excess Births.	Diff.: as % of Births.	Year.	Deaths + Survivals.	Births.	Excess Births.	Diff.: as % of Births.
1841	72,660	73,784	1,124	1·9	1841	26,589	29,216	2,615	8·9
1851	74,767	86,530	11,763	13·6	1851	28,190	34,089	5,899	17·31
1861	66,625	89,719	23,094	25·7	1861	49,842	38,952	—10,890	27·9
1871	81,454	95,367	13,913	11·6	1871	52,656	44,319	— 8,337	18·8

URBAN DEATH-RATES IN THE EARLY NINETEENTH CENTURY

An idea is gaining ground that the crowded and insanitary towns of the Industrial Revolution showed a marked improvement in their condition during the early decades of the nineteenth century, only to relapse again in the 'thirties and 'forties. This idea is puzzling to readers of the various reports on towns in the 'forties, since no mention is made of this happy age, when the death-rate in certain towns, afterwards renowned for their slums, sank to a level only attained by the whole country nearly a century later. It would almost seem as if the problem of healthy life in congested areas had been solved and the solution forgotten. Statistics, however, are there to prove the facts, and statistics cannot be ignored. This paper is an attempt to examine the basis on which these statistics are built, with special reference to Manchester. It may seem presumptuous for one whose ignorance of mathematics is profound to attempt to question the work of statisticians, but the writer can plead that she has not wandered out of regions where the simple arithmetic of schoolroom days serves as a guide.

In 1801, when the first Census was taken, John Rickman, the writer on economic subjects, was put in charge of the administrative details. Papers were sent out under his direction containing six questions, and among these questions were two which must have put a severe strain on every " Rector, Vicar, Curate or Officiating Minister " who was expected to answer them. The clergy were asked to extract from their Parish Registers the numbers of baptisms and burials, distinguishing between male and female, for every ten years from 1700 to 1780, and after that for every year till 1800, included. Marriages they were required to give for every year after 1754, when Hardwicke's Marriage Act came into force, till 1800, included. The task was heavy, but the response seems to have been remarkably ready, for no less than 11,065 returns from Parish Registers were received. These were grouped together under Hundreds, or under large towns, and the Hundreds and Towns were grouped into Counties. Beneath each Hundred or Town a list of the Registers used was given. When returns were stated to be defective the average for preceding and subsequent years was taken. The results were

published in 1801–1802 in a most interesting volume, called the Parish Register Abstract. The original schedules were unfortunately destroyed by order of a departmental Committee in 1904, so that we only have the results in groups.

In 1811 the clergy were asked to perform the same task for the ten preceding years, but Rickman now found that there had been considerable errors in the 1801 returns; there were 516 fewer than in the 1811 list, but, on the other hand, there were a considerable number of duplicates, for in asking for certain supplementary returns Bacon's *Liber Regis*, with its archaic spelling, was used, and thus the same place might be required to give two returns under different names. The distribution of schedules, again, had been a source of error. Each overseer had been given two, the first, the enumeration schedule for his own use, the second, the Parish Register schedule for the use of the Officiating Minister. But the unhappy Minister, specially in the North, might have several townships in his parish, and for each township might receive a schedule: if conscientious he might spend much time filling each up from his Register. In fact, wrote Rickman, "the Parish Register Abstract in general had necessarily been formed with a degree of expedition not permitting sufficient investigation." The 1801 totals for each year were, however, corrected by an elaborate system of adding certain percentages obtained by subtracting the averages of the duplicated parishes from the averages of the additional parishes. These corrected totals Rickman considered fairly satisfactory. As the original schedules have been destroyed, it is of course impossible to make corrections for the different areas.

It may be noticed that in the 1811 returns estimates were made in some places of the number of unregistered births and burials, but it is mentioned that the clergy of populous places did not usually hazard a guess. Similar returns to those of 1811 were asked for in 1821 and 1831, but by 1841 the system of Civil Registration had been introduced.

Let us now consider the figures for Manchester more closely. Mr. Griffith in his admirable study of *Population Problems of the Age of Malthus* gives a table of the death-rates in five large towns, including Manchester, worked out, for the first four Census years, from these Parish Register returns by taking the average of the deaths for five years. The Manchester deaths (or burials) per thousand are as follows:

1801.	1811.	1821.	1831.	1840.
24·7	14·3	14·1	30·2	33·8

Mr. Griffith points out that the rates for 1811 and 1821 are "astonishingly low," and may illustrate "the difficulty of obtaining safe information from the data that are available," but nevertheless Manchester is used as one of the five towns to show the general trend of the mortality statistics. Even if we add on a considerable percentage to the 14 per thousand figures of 1811 and 1821, they would still seem to show that the health of Manchester had responded in a most satisfactory way to those general improvements noted and initiated by Dr. Percival in the 'seventies. This was certainly the opinion of Sir Gilbert Blane in his *Select Dissertations on Medical Science*, published in 1822, and of Dr. F. Bisset Hawkins in his *Medical Statistics* published in 1829. Both of them drew attention to the remarkably low death-rate in 1811 of 1 in 74, and the latter thought that the rate had sunk still lower in 1821. Kay-Shuttleworth, it is true, drew a horrifying picture of the conditions of life in Manchester in 1832, without suggesting that the evils were a special growth of the last ten years, but Francis Place declared that Kay-Shuttleworth's descriptions of squalor and disease referred only to the Irish immigrants. A curious point worth notice is that in 1773 Dr. Percival stated that "half of all that are born in this town die under five years old," and in 1841 the Registrar-General reported that out of 100,000 born in Manchester, 49,910 only were alive at six years of age.[1] In between the two epochs, with the rapid fall of the general death-rate, there must presumably have been a considerable decrease in infantile mortality.

In discussing the question of rates of mortality, Sir Arthur Newsholme remarks:[2] "the population used must be precisely that which produced the deaths contained in the death-rate; and conversely the deaths must comprise all the deaths occurring in this population and no others." We will see how far these conditions are observed in the case of Manchester.

First we must define what we mean when we talk of Manchester. Are we speaking of Manchester parish or of Manchester town, and is Salford included? Here we meet with the bewildering tangle of English local divisions. On the one hand there is Manchester parish, which stretches over an area of more than 60 square miles and contains 30 townships, of which Manchester is one and Salford is another. On the other hand, there is Salford Hundred, a large division containing no less than eleven parishes, of which Manchester parish with its 30 townships is one.

[1] Kay-Shuttleworth, *Four Periods of Public Education*, p. 126.
[2] *Vital Statistics* (1923), p. 189.

Now in the 1801 Parish Register Abstract the series of returns for Manchester, from which the death-rates for Manchester in Mr. Griffith's table are calculated, comes from the Registers of the Collegiate and Parish Church, and from the Registers of St. James', St. John's, St. Peter's, St. Mary's and St. Michael's, "all in the town of Manchester." Do the Registers of the Collegiate and Parish Church and of the other churches in Manchester cover the population of the whole of Manchester parish? Clearly not, for there are not less than ten other sets of parish registers from places within the parish of Manchester (including Salford, Ardwick, Cheetham, etc.) which are grouped not under the Manchester series but under the series for Salford Hundred. Into the Salford Hundred series, in fact, are swept all the registers within the extensive Hundred boundaries, with the exception of the registers in the Manchester township, one of the 30 townships in Manchester parish. Hence it is clear that the population covered by the returns for Manchester is the population for the township of Manchester only. But precision cannot be attained, as some burials from the outlying parts of the parish may have taken place in the mother church, and this might cause the death-rate to be over-stated.

The matter is further complicated by the fact that in the 1811 returns, and later, the Parish Registers from Salford township are no longer grouped under Salford Hundred, but are transferred to the Manchester series, so that from that date in calculating the death-rate for Manchester the population to be used is the population of Manchester and of Salford townships.

Now if we examine the long list of figures given for Manchester town, beginning with 1700, certain features stand out. Till 1781 the burials, which till that date are only given for every ten years, never reach four figures. From 1781 till 1790, with one exception, they are between 1000 and 1600 with an average of 1257. The exception is the year 1782, when the deaths suddenly drop from 1160 to 838, only to rise again next year to 1248. From 1791 till 1802 (inclusive) again, with one exception, they vary between 2000 and 2700, with an average of 2195. The exception here is the year 1797, when the figure sank from 2095 in the previous year down to 1322. A curious immunity for females marked this year, only 393 dying as compared with 1121 the year before, and 1014 the year after. Males, it may be noticed incidentally, had had their turn of immunity in 1790, when only 323 died, as compared with 745 and 992 for the previous and following years respectively. From 1803 to 1820, again

with one exception, the burial figures sink down under 2000, showing an average of 1603. This at a time when the population of Manchester and Salford was rising from 84,020 to 133,788 would be remarkable enough, but it is still more remarkable when we remember that the Salford burials are now included in the Manchester total. What better testimonial to the health of a district could there be than that its deaths should decrease by more than a quarter whilst its inhabitants increase by over a half?

But though the figure for the death-rate is, as we have seen, 14·1 for 1821, that very year the era of health comes abruptly to an end. The burials jump suddenly from 1615 in 1820 to 3327 in 1821. In 1823 they rise to 4809, in 1826 to 5515. It almost looks as if some severe epidemic were sweeping away a population unused to disease. A special short Parliamentary Return,[1] published in 1831–32, giving the number of the burials in the town of Manchester from 1821 to 1830, furnishes some interesting particulars which suggest that the epidemic was specially severe amongst Nonconformists. Each year the number of "Dissenters and others" included in the total is given, and Dissent seems to have obtained a firm hold in Manchester. In the ten years for which the returns are made 33,005 Dissenters are buried to 15,133 members of the Established Church. About the first few years of the series there seems something odd. In 1821 death visited Church and Dissent alike, 1561 Churchmen dying to 1726 Dissenters. In 1822 only 1285 Churchmen died to 2044 Dissenters, and when we come to 1823 there was a terrible mortality in Nonconformist circles: to 1535 dead Churchmen there were no less than 3230 dead Dissenters, that is over a thousand more than in the previous year. From 1823 to 1830 the Churchmen die on an average of 1535 a year, that is, roughly at the same rate as the whole population of Manchester from 1803 to 1820, whilst the Dissenters show an average of 3654.

The key to the mystery is given in one of the volumes of Census Returns published in 1833 (P.P. 1833 XXXVIII). "The Population of Manchester, second only to that of the Metropolis, will appear eminently to demand a *Table of Mortality;* which, however, is purposely omitted, because the numerous classes of society burying at *Chorlton-Row* and other Burial grounds—where no Registry of Ages is kept—such a Table would be fallacious. The number and Sex of those irregularly buried has now been obtained and included, *averaging at* 3500 *per annum*, but in 1821 such Register was not obtained. . . ."

[1] Pp. 1831–32, XLV.

It was, in fact, not absence of burials, but absence of Registers that gave Manchester its low death-rate.

Suppose we add to the burials for the five years before 1821 the same proportion of burials of "Dissenters and others" as are given for the five years before 1831, we shall find, instead of a total of 9448 deaths, a total of 32,362: in other words, a death-rate of 48·3 per thousand. This is, of course, a fantastic figure, but perhaps it is no more fantastic than the figure of 14 per thousand, for if we split the difference we get a death-rate of 31 per thousand, which closely resembles those of the succeeding years.

If we turn back to the eighteenth-century figures of Manchester mortality, when there were probably fewer "Dissenters and others" to complicate matters, we find some puzzling features. The Parish Register Returns for the town of Manchester contain, as we have seen, returns not only from the Collegiate and Parish Church, but from various other churches as well, and that several of these other churches had graveyards, some of them large, we know from Aston's *Picture of Manchester*, published in 1816.[1] Yet Aston gives a series of figures extracted from the Registers of the Collegiate and Parish Church alone, in which the totals for burials from 1740 to 1791 (inclusive) are actually higher than those in the Manchester Parish Register Returns; for example, 988 to 719 in 1770, 1940 to 1212 in 1790. Baines, in his *History of Lancaster*, published in 1825, gives for the eighteenth century the same figures as those used by Aston, and he too professes to take them from the Collegiate Church Registers alone. He works out a decennial average. After 1800 he includes other churches, and "the funerals in the cemetery in Rushulme Road," and his figures are the same as those in the Census Parish Register Returns, except for the years 1821–24, when his figures are just over half those in the Census. Presumably then there was a considerable leakage in the Census returns for the years between 1740 and 1791, and those who like to amuse themselves with working out death-rates from the population enumerated at Manchester in 1773 will find a large variety of results to choose from, roughly from 31 to 44 per thousand, according to the population or the deaths that are used.

Let us now examine more closely the figure for the first Census year, 1801. This is, as we have seen, 24·7 per thousand, a low

[1] Though the registers for St. Anne's, with its "filthy and disgraceful cemetery," are omitted, the returns include St. Mary's (consecrated 1756), with a graveyard, "a pattern of decorum and neatness," St. John's (consecrated 1769) with vaults and extensive churchyard, and St. James' (consecrated 1787).

figure, but not so sensationally low as the figures to follow. But this figure of 24·7 is apparently obtained by using the joint population of Manchester and Salford, although the Salford Register Returns still come under the series for Salford Hundred. If we use the Manchester population alone (70,409), the resulting death-rate is 29·4. Again, suppose that instead of taking the average of the five previous years we take that of four years only, omitting the freak year of 1797, when only 393 females died, then the result turns out to be 32 per thousand, a result curiously like the 30·2 of 1831, or the 33·8 of 1841.

The truth seems to be that from such data as we possess it is impossible to produce any satisfactory figures about the death-rate for Manchester. What about the other towns? When one sees such figures as 13·8 per thousand for Bristol in 1811, 16·9 in 1831 and 31 in 1840, or 14·7 per thousand for Birmingham in 1801, and 14·6 in 1831, or 21 per thousand for Liverpool in 1831, though the rate was 34·8 per thousand ten years later, one cannot but suspect that these figures are worth as much as and no more than the figures given us for Manchester. They too are based on the Census Parish Register Returns, and though the incumbent mentioned in the 1833 Report on Parish Registers, who wrapped his pheasants in pages from the Register, or the parish clerk's daughter who found the thick paper useful for her lace school were, of course, exceptions, there was considerable laxity in the way in which the Registers were kept. This comes out clearly enough even in the case of marriages. Hardwicke's Marriage Act of 1753 stiffened up the procedure for marriages, and marriage figures are obviously more trustworthy than those of baptisms or burials; as Rickman put it, "the solicitude of the Female and her Family aided by the precision and severity of the Marriage Act" had this effect. Yet even so George Rose, in introducing his Bill for regulating the keeping of Parish Registers in 1812, could state that he did not believe there were "fifty registers in the whole country kept in the manner in which they ought to be," and that owing to defective registers it was often impossible for seamen's widows to claim the money due to them.[1] Rose's Act (52 Geo. III. cap. 146) provided the clergy with 33,000 neat, uniform books, and contained many instructions (some impossible to fulfil) about their use, but on its way through Parliament the Bill was shorn of all its penalties, except that of transportation for fourteen years for false entries or wilful defacement. By an amusing error of drafting, which made the Act

[1] Parl. Reg., February 24, 1812.

notorious, this penalty was to be divided between the informer and the poor of the parish.

If the entries of marriages were unsatisfactory, the entries of burials must have been still more defective. Consider the conditions under which bodies were buried in rapidly growing towns. Aston gives us a vivid picture of the arrangements at the new burial-ground connected with the Parish Church in Manchester. This, "the largest cemetery in the town, is appropriated to the interment of poor persons who have no family place of burial. . . . The number of poor persons who are continually dying in Manchester must be great, and an expeditious and economical method of interring the bodies of the dead has been adopted. A very large grave, or, more properly, a pit for the reception of mortality, is digged, and covered up (when not actually in use for depositing the remains of the dead) with planks, which are locked down in the night, until the whole is filled up with coffins piled beside and upon one another. The cavern of death is then closed, and covered up with earth; and another pit is prepared, and filled in the same manner. The cemetery was consecrated by the Bishop of Chester the 21st day of September 1787, since which many thousand bodies have been interred in this singular depot (it might almost be said *magazine*) of mortality." It is difficult to believe that this "expeditious and economical method" included an entry in the register for every coffin in the depot.

But apart from any question of defective registers there are Dissenters to be considered. The story of Dr. Price's Northampton Table is well known. By omitting to make any allowance for Baptists he worked out the duration of life from certain Parish Registers as 24 years instead of 30 years, an error which, though favourable to Insurance Companies, cost the public two million pounds when the Government used his table for an annuity scheme.

Percentages to make up for the deficiency can, of course, be added. Mr. Griffith, working out the difference in the figures before and after the introduction of civil registration, adds 10 per cent. to the burials; Dr. Brownlee, in his articles on Birth and Death Rates, in *Public Health* in 1916, adds 20 per cent. This percentage is obtained from certain figures given in the Registrar-General's Seventh Annual Report, where the total deaths for the three years 1838, 1839, 1840 are given as 1,041,373, and the registered burials for those years as 883,912. Incidentally it may be noted that during those three years the Registration Act was in force, so that there was a penalty of £10 for burying a body

without registration. If the leakage was so considerable after 1837 it seems probable that it was greater before. For we must remember that till 1837 there was no obligation on anyone to register a burial any more than a birth; indeed from 1783 till 1794 there was a certain discouragement in the form of a stamp duty of 3*d.* for each entry of baptism, marriage or burial. If a burial took place in a burial-ground connected with a church there would, if the parson was active, be an entry in the Parish Register, but if a Dissenting burial-ground or a cemetery unconnected with a church was used, no entry need be made. Rickman, in his Preliminary Observations to the 1811 Census, mentions that the collector of the burial tax in 1794 found that there had been 3148 unregistered burials in London in the preceding six months. Rickman estimated that about a third of the burials in London were unregistered. As late as 1839 G. A. Walker, the surgeon, the well-known authority on the horrors of graveyards in towns, could write of London, in his *Gatherings from Graveyards,* "I am perfectly convinced that from many private burial-grounds, in low and crowded neighbourhoods, where the lowness of the fees has occasioned an immense influx of funerals, *no returns whatever have been made,* or returns purposely inaccurate have been furnished. The returns from some places I could name would be instructive." The horrible burial habits described by Chadwick in 1843 were not peculiar to London, and it was precisely in rapidly growing towns that cheap-burial-grounds became a profitable speculation. Rickman mentions them as existing in certain towns, including Bristol, but it is possible that they existed in other towns without being noted. It must be remembered that a percentage of addition which may, or may not, be satisfactory for the whole country can be entirely misleading for a small area.

But even supposing that the exact population "which produced the deaths contained in the death-rate" could be found, and suppose that some approximate estimate could be made of the percentages to be added for omissions in registers and for burials in cemeteries without registers, would the crude death-rate, that is, the death-rate per thousand without reference to age or sex, worked out from this data, provide satisfactory evidence of the health of a growing town? "When used as a test of the salubrity of a small district," writes Sir Arthur Newsholme,[1] "especially when an exceptionally low death-rate is concerned, it [a crude death-rate] is to be regarded with suspicion. Some source of fallacy

[1] *Vital Statistics,* p. 191.

almost certainly lurks in the returns." To change these crude death-rates into standardised death-rates for these early periods is, of course, impossible. All these towns were receiving large numbers of young and healthy immigrants, and the more rapid the growth the more fallacious as a test of health would the crude death-rates prove. A hundred and fifty years ago Dr. Percival saw this very clearly. In discussing why it was that the Quakers in Manchester, living in good conditions, with sober habits, showed such a surprisingly high death-rate for the seven previous years as 1 in 24·6, he accounted for it as follows : " . . . the Quakers here have had few or no accessions to their number by supplies from other places during the last seven years. . . . Were it not for new settlers in the prime of life, who annually pour into Manchester, it is probable that more than 1 in 25 of its inhabitants would die annually."'

Percival laid stress on the improved conditions of town life in Manchester in his time; better housing, better clothing, better medicine, better food. He added a significant sentence : " But it must be acknowledged that large towns are injurious to population, and the advantages I have enumerated, which in hamlets or country villages would have operated with full force to the benefit of mankind, have only served to check the destructive tendency of the accumulation of inhabitants in Manchester."

A close examination of the figures for Manchester does not lead to confidence in statistical proof of improved urban conditions in the early nineteenth century. John Finlaison, that enthusiastic statistician, writing in 1829, used words that may perhaps be appropriate to this subject a hundred years later : " If it be again contended that observations on statistical bills of mortality furnish, nevertheless, sufficient approximations to the truth, I would beg leave respectfully to inquire whether any such approximation may not in fact be an approach to some ideal standard of truth existing only in the mind of the calculator, rather than to the truth itself, of which perhaps no certain criterion has heretofore been discovered."

BARBARA HAMMOND

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THE POPULATION PROBLEM DURING THE INDUSTRIAL REVOLUTION

A Note on the Present State of the Controversy

The problem of the English population a century ago has recently attracted several independent—too independent—investigators. It is naturally tempting to economic historians, since it offers them an opportunity for the exercise of the now popular quantitative method in a field in which they have not been seriously anticipated by the statisticians. They should remember, however, that they owe the privilege of priority chiefly to the absence of statistics, and that, consequently, the appeal from logic to mathematics is here particularly dangerous. Mr. Griffith's book on *Population Problems of the Age of Malthus* made an immediate impression, as, indeed, it deserved to, but his estimates have been too readily accepted and his conclusions too hastily grasped as a cudgel with which to belabour a certain school of historians and theorists. Even when the facts have been ascertained, their interpretation is a matter of great delicacy. And the facts can, for the most part, only be guessed. In these circumstances the results of statistical research have no more title to respect—probably less—than the views of well-informed contemporaries and the reasoned expectations of the modern historian and economist.

One point, at least, is clear. However great may be the margin of error in Mr. Griffith's calculations, it cannot wipe out the great dip in the death-rate curve during the Industrial Revolution. This can be accepted as fact. The statistical evidence is convincing, and it does not conflict with evidence of other kinds. There is a logical explanation in the advance in medical science, affecting in particular infant mortality, and there is

corroboration from contemporary sources. All the investigations into local and particular death-rates made at the time pointed that way,[1] and the belief that mortality was declining in England as a whole was shared, not only by Rickman and McCulloch,[2] but also by Malthus himself. The second edition of the Essay, written shortly after the first Census, contains the following passage :—" It would appear, by the present proportion of marriages, that the more rapid increase of population, supposed to have taken place since the year 1780, has arisen more from the diminution of deaths than the increase of the births." [3] The point was reiterated in the Report on the 1851 Census, and the main causes of the decline of mortality since the seventeenth century were sketched.[4]

These facts should by now be well known. Mr. Griffith admits that Malthus's second thoughts differed little from his own theories, but he does not acquit him on that account. Malthus has laid himself open to a new charge, that of either missing or deliberately suppressing the logical implications of his knowledge. He should, it is suggested, have considered the falling death-rate as proof that the population was not too large. But he was looking to the future, and in twenty years the death-rate was rising again. If he still insisted that a check was desirable, " he might have been tempted to advocate measures which, instead of checking the birth- and marriage-rates, should check the decline in the death-rate. The obvious impossibility of advocating such measures is probably one reason why it was not done." [5] This is a cruel libel on a man whose one object in desiring to reduce the birth-rate was to keep down the death-rate, to substitute " preventive " for " positive " checks. He could not have been tempted for a moment, and his reasons are perfectly obvious. It is a fallacy to suppose that, in this matter, the nature of the cause is an index to the nature of the remedy. It is perfectly logical to hold that population pressure induced by a falling death-rate should be alleviated by reducing the birth-rate. In fact no other course is possible. As Sir William Beveridge has neatly said, " the idea that mankind . . . can control death by art and leave birth to Nature is biologically absurd." [6]

[1] See M. C. Buer, *Health, Wealth and Population*, pp. 270–1.

[2] See Griffith, pp. 40–1.

[3] Second Edition, 1803, p. 311.

[4] " The first evident cause of the increase of the population is a diminution of their mortality." Part II, Vol. I, p. lii.

[5] *Op. cit.*, p. 99.

[6] Economic Journal, December 1923, p 473.

It is, indeed, fatally easy to distort the picture. The obvious temptation is to assert that the death-rate was not only the variable, but also the determining, factor in the increase of population, and that, to understand the causes of this increase, we should study the deaths rather than the births. But, clearly, a horizontal line on a graph may be as dynamic as a diagonal; the forces that prevent a birth-rate from falling may be as significant as those that make it rise. This is elementary. The next stage along the road of error is travelled, I think, under the influence of a sense of symmetry, which demands that the new theory should be the exact reverse of the old. Tradition said that the increase of population during the Industrial Revolution was accompanied by a high death-rate but a still higher birth-rate. The truth is that the birth-rate was low and the death-rate lower. We know why the death-rate fell: we must look for the forces which pulled the birth-rate down, as Malthus looked for those that were pushing it up. The most recent writers on the subject, J. S. Blackmore and F. C. Mellonie,[1] are so ingenious as to force symmetry one step further by selecting the same cause as Malthus, the Speenhamland Poor Law policy, and attributing to it opposite effects. Their article is in many ways remarkable. They very diffidently submit the, to them, new theory that the death-rate was falling, in apparent ignorance, not only of the authorities cited above, but also of the recent writings of Dr. Brownlee and Mr. Griffith, and they show a touching faith in the sanctity of even the shadiest figures. Arguments, they say, are "empty theorising," unless supported by a study of "objective facts." But it is folly to suppose that any facts obtainable about the allowance system of those days could hold their own for a moment against the theories of modern economists, based, as they are, on far more accurate observations of human action. I shall return to their figures.[2]

Undoubtedly many contemporaries believed that the birth-rate was rising, and grossly under-estimated, or even denied, the fall in the death-rate. It has been proved that they were wrong. But the essence of what we may call the "Malthusian" position was this. First, the population was increasing faster than was desirable. Secondly, the birth-rate should be checked. Thirdly, the birth-rate was being stimulated by certain economic forces

[1] "Family Endowment and the Birth-Rate," ECONOMIC JOURNAL, Historical Supplement, No. 2, May 1927.

[2] In a second article, ECONOMIC JOURNAL (Supplement), Jan. 1928, these authors have abandoned their theory. They find no evidence of a relation, positive or negative, between Family allowances and the birth-rate.

which could be removed by proper political action, notably the Poor Laws and the demand for child labour. I wish to suggest that the best modern estimates of the births and deaths for England and Wales as a whole most certainly do not prove this view to have been false. Rather, they appear to confirm it, or, as I prefer to say, in view of the highly speculative nature of the statistics, they are consistent with it. The result is purely negative. It is only by a comparative study of local figures that there is any hope of proving the last, and most important, point of the three either true or false. That I have not attempted.[1]

We may approach the problem from various angles. We may speak of a law of population. If we do we shall be in good company. It is not necessary for this argument to believe that the law of growth is capable of exact expression nor to subscribe to the theory of Prof. Raymond Pearl that all growth follows the logistic. We may say, for example, that population growth is determined by births and deaths, emigration and immigration, and that these are related to the socio-economic environment of the people in ways that can be analysed and, to some extent, foreseen. But we must go a step further to avoid confusion. More fundamental is the relation between the total population of a country and its socio-economic organisation, the relation on which is based the theory of the optimum. The total is, of course, regulated by the ratio between births and deaths—if we ignore migration as irrelevant to our particular problem—but both the birth-rate and the death-rate vary independently under the influence of forces which do not affect the conditions which determine the optimum. If population growth and economic progress are to keep step together, a balance must be maintained between births and deaths, but that balance is bound to be frequently disturbed by the action of forces which have nothing whatever to do with social and economic progress, measured by its capacity to sustain population. If there is any truth in the conception of a law of population, we should expect to find that, when the balance is disturbed in this way, it tends to rediscover itself, probably at a new level. For example, a victory of medicine over disease will lower the death-rate and increase the pace of population growth without providing sustenance, employment or the rudiments of comfort for a single extra person. If no corresponding economic progress takes place, we should, on this

[1] For the difficulties involved in local estimates, see Barbara Hammond, *Urban Death-Rates in the Early Nineteenth Century*. ECONOMIC JOURNAL (Supplement), Jan. 1928. As they arise largely from "the bewildering tangle of English local divisions," they are greatly reduced when a national average is taken.

hypothesis, expect to see the birth- and death-rate curves, which have diverged, converge again, though, very possibly, without exactly recovering their previous relation; we should, at least, assume a pressure or pull in favour of a *rapprochement*. A similar state of affairs may arise if an economic revolution stimulates a rapid increase of population, and the population gathers a momentum which carries it further than is required. We have, then, a path sketched out for the population curve by the conditions of economic progress, and oscillation about that path caused by the disturbance and readjustment of the balance between births and deaths. This path is, of course, not necessarily that of the optimum. This view is consistent with the fact to which Mr. Yule has drawn attention, that, although short-period percentage increases of population give an incoherent succession of ups and downs, when long-period figures are taken, for fifty years in the case of England and Wales, these oscillations disappear, and a smooth and clearly directed movement is revealed.[1] It is as though Nature were trying to hit the mark by a system of trial and error, each error setting up a pull in the contrary direction.

A further symptom that should appear if there is a law, in this very general sense, in operation, is an associated movement of birth- and death-rates. The law, by prescribing limits within which the balance should fall, links the two together. Mr. Yule has examined this point also, with some interesting results. His first assertion is that, among nations of about the same state of economic development, or, as supporters of a more precise law would say, at about the same point in the cycle of growth, the higher the death-rate the higher the birth-rate, and vice versa. This is sustained by a correlation of + 0·81 between the figures for 1901–10 for twenty-two Western European States. This does not merely mean that where the rate of growth is the same, the excess of births over deaths must be the same also, except for a relatively small allowance to be made for migration. That is axiomatic. Nor does it merely mean, though this is important, that since Western Europe became an economic unit, the rate of population growth in the parts selected—and it should be noted that they do not include France—has been of the same order of magnitude. Its significance is this. It suggests that the more fundamental forces controlling the aggregate population of an area, and therefore the rate of increase, are stronger

[1] The growth of population and the factors which control it. *Journal of the Royal Statistical Society*, Vol. LXXXVIII, p. 12.

than the particular forces working directly on the births and deaths, and that over an area of this kind, in normal times, variations in birth- and death-rates are greater than variations in the rate of population growth. Consequently, when we find, as we do in England at the end of the eighteenth century, an unprecedented fall in the death-rate, caused, for the most part, by non-economic forces, we should not expect the whole of this to be passed on, unmodified, into the rate of population growth. We should assume a pull set up, tending to drag the birth-rate down, and if the birth-rate did not fall, we should conclude that exceptionally strong forces were at work holding it up.

Mr. Yule goes on to show the "consilience between the movements of the birth-rate and the death-rate," illustrating it with two tables. The first covers fifteen countries between 1841–50 and 1871–80, the second nineteen countries between 1871–80 and 1901–10. The former is the more important for our purpose, as it deals with a period when deliberate control of births played about the same part as in the England of the Industrial Revolution. The correlation here is + 0·70. In nine cases a falling death-rate is associated with a rising birth-rate. What is the interpretation? The table clearly covers a period when conditions in Western Europe were favourable to a high rate of natural increase and a rising birth-rate. In only two cases, Sweden and Belgium, did it fall. Of these, Sweden heads the list on the death-rate side with the biggest fall recorded, namely, 2·3 points per 1000. Belgium comes third. The correlation suggests, therefore, that the more the death-rate fell, the less the birth-rate rose, and that a falling death-rate is a limiting check on a rising birth-rate. We observe, too, that when the fall exceeded 2 per 1000, the rise was negatived. As the fall in our case was, at the least, nearly nine points, we may say that this statistical evidence fits in with the view that, in such circumstances, a stationary, or slightly falling, birth-rate must be taken as indicative of phenomenally high fertility. Mr. Yule concludes with the important confession, which should be carefully weighed by students of the population problem of this period, that "my neglect of the death-rate as a factor in the movements of the birth-rate in former papers was a serious mistake." [1]

But, even if the birth-rate was surprisingly high, it does not follow that it was undesirably high. The downward pull might have been counteracted by the rapidity of economic progress, and the truth may be that the Industrial Revolution called into

[1] *Loc. cit.*, p. 33.

being no more people than it required and could sustain, so that the balance between births and deaths was not upset by the doctors, but simply adjusted to the needs of the new situation. So neat a harmony between unrelated forces would be very startling. Nature does not, as a rule, imitate the ballet dancer, who springs accurately through the air and lands in perfect equilibrium. She is more likely, under the influence of a severe shock, to oscillate like a drunkard steering for a lamp-post. And there are special reasons for expecting this in our case. For even if it cannot be proved that the population ever became excessive, yet it can be urged that the peculiar character of its growth brought pressure to bear locally on those responsible for bearing and rearing the new generation, which might have been expected to depress the birth-rate even if such a depression were not imperatively demanded by the economic circumstances. We know that the chief feature of the falling death-rate was a rapid decline in infant mortality. It was a question of saving lives in the first few hours, days or weeks after birth. Imagine the effect on parents. It may be possible to bring ten children into the world, if you only have to rear five, and, while one is "on the way," the last is in the grave, not in the nursery. But if the doctor preserves seven or eight of the ten, and other things remain equal, the burden may become intolerable. In so far, therefore, as there was, at this time, any conscious or unconscious control of the birth-rate in the interests of economic welfare or physical comfort, the decline in infant mortality must have acted as a strong incentive to restriction. The point appears more substantial if it is treated nationally rather than individually. The economic historian is interested in the rate of increase of a population in relation to the social and economic conditions of its country. The birth-rate is a factor in that rate of increase. With respect to its economic consequences—and they become, in turn, economic causes—a decline in infant mortality is almost exactly equivalent to an increase of births. It is true that new persons arrive without new confinements, but the economic significance of a confinement is small compared with that of the labour of suckling, nursing and rearing, the cost of feeding and clothing, the pressure on house-room, which follow. We might, in fact, speak of the number of children reaching the age of six months or one year as giving the "net birth-rate," which is more vital than the "gross birth-rate" to the population problem as it presents itself to the economic historian. In the early part of our period a stationary, or slightly

declining, "gross birth-rate" implies a rising "net birth-rate." It is, therefore, misleading to contrast a falling death-rate with a rising birth-rate as causes of population growth, without pointing out that death may come at any age, but birth usually occurs about the end of the ninth month. If the lives saved had been those of septuagenarians, the contrast would be real. Actually, it is false.[1]

In the foregoing discussion I have avoided using the phrase "over-population." I did not want to queer the pitch. In the exact sense to which modern theory would confine it, it is of so little service to the discussion of actuality that even the most reputable writers on practical problems use it to denote something less tenuous and equally entitled to the name. Still nearer to the heart of life we find the frank misuse by the journalist, which defeats all clear thinking. Consequently, the word is, to any argument in which it appears—if I may be allowed to mix my metaphors—a loophole through which every critic can draw a red herring. In its exact sense it is a term of static economics denoting a state of affairs such that a reduction in the numbers of the occupants of the area under consideration, while all other circumstances, including the age distribution, remained the same, would be followed by an increase in returns per head. Writers on practical issues use it in a dynamic sense to indicate the presence within the area of more persons than can be supported without a fall in the standard of life, or, perhaps, without retarding the rise in the standard, within a reasonable time and assuming a normal adaptability of economic structure to changing conditions. This view is implicit in Sir William Beveridge's address on Population and Unemployment, where, arguing that unemployment in 1879 was not a sign of over-population, he remarks that anyone who "had argued that the existing population of the United Kingdom was all that the country could support without lowering its standards would have been lamentably discredited at once."[2] The country had received a shock, it

[1] On this point compare M. Rubin and H. Westergaard, *Statistik der Ehen*, p. 109. They produce statistical evidence to show that infant mortality rises in proportion to the number of children in the family. This is partly due, they say, to the increased difficulty of caring for the children. They then add: "Uebrigens wird man auch mit einigem Rechte behaupten können, dass nicht die vielen Kinder die aussergewöhnliche Sterblichkeit hervorrufen, sondern ungekehrt die grosse Sterblichkeit die vielen Kinder, insofern der Kinderverlust physiologisch und psykologisch die weitere Kindererzeugung ermöglicht und dazu anspornt." If high infant mortality is an incentive to births, then low infant mortality must be a deterrent.

[2] Economic Journal, December 1923, p. 448.

had been disturbed by the emergence of new economic factors, but, by adapting itself to the changes, it swiftly recovered and resumed its progress, and this recovery required only a reasonable time—three or four years perhaps—and demanded, not a revolution, but simply the amount of vitality normal in a healthy economic society. That is the picture suggested.

I shall not try to prove that the England of, say, 1820 was over-populated in either of these senses. Conditions were in such a state of flux that an application of the first test is hardly possible. Miss Buer, in her recent essay on the Malthusian controversy,[1] leaves us in some doubt whether she intends to apply it or not. "Strictly speaking," she writes, "over-population was impossible according to Malthus's theory. He, however, was not a clear thinker." This certainly suggests the pure classical conception. But when she proceeds to argue that in fact England was not over-populated at this time, she permits herself the following sentence:—"From the point of view of food supply there seems little historical basis for the statement that England in 1815 was over-populated as compared with earlier periods," which suggests no conception at all. Malthus's retort is a simple *tu quoque*. Her exact meaning, however, is unimportant, as she does not get within measurable distance of a proof. Two arguments are put forward. One is that food imports did not increase with the population, a point that only carries weight if it can be shown that the people continued to eat the same quantity of food per head. The history of Ireland shows that a country may export food while living on the brink of famine. The other is the familiar assertion that the distress is fully accounted for by the effects of war, based on a false analogy with 1918. Careless comparison of these two epochs has done much harm to the cause of historic truth. A subsidiary argument, derived from the age-constitution of the people, is interesting, and I shall revert to it later. Over-population in the second sense certainly did not exist, for it is demonstrable that, within a reasonable time, the country supported an even larger population at a definitely higher standard of life, and a sudden cessation of population growth at that moment might have shot economic progress dead in its tracks.

There are, however, peculiar features in the history of the early nineteenth century which suggest two things. First, that economic conditions created a force calculated to check the rate of population growth in the immediate future. Secondly, that

[1] "The Historical Setting of the Malthusian Controversy," in *London Essays in Economics*, see pp. 138 and 141.

this force was consequent on the pace and character of population growth in the immediate past. In other words, even if there were not over-population, there was population pressure, resulting from a failure of economic progress and the increase of numbers to keep step together. A pressure of this short-period dynamic kind, being not that of a moving body impinging on a stationary one, but of two moving bodies in frictional contact, will be remedied, not by an absolute reduction in the size of the population, but by an adjustment of the rate of growth. But before we can appreciate this we must have certain figures before us.

Take first the annual rate of increase of the total population, including army, navy and merchant seamen, as given in the Census Report for 1861. The figures are : [1]

TABLE I.

1801–11	1·307
1811–21	1·533
1821–31	1·446
1831–41	1·326
1841–51	1·216
1851–61	1·141

The rate of increase, as is well known, reached its maximum in the second decade of the century. Although we expect some lag in the response of population growth to economic conditions, it is rather surprising to find the lag so great. The first years of this decade saw acute food shortage, amounting almost to famine, and we should have expected this to reduce the rate for the decade. But in this same period the death-rate reached its minimum, a fact which the mere cessation of hostilities must have contributed to produce. The decline in the rate which begins after 1821 lasts till 1861. In the following decade the rate was 1·23. Here again there is a slight lag, since, without doubt, the period 1851–61 was more prosperous than the period 1841–51, though the change was gradual. But the correspondence between population growth and economic prosperity is clear, and can be traced on into the twentieth century.

The next point is to determine the share of the birth-rate and death-rate respectively in producing this response to the pressure of economic distress. The most recent, and best known, estimates of these rates are those in Mr. Griffith's book, but they do not stand examination. On the birth-rate side the problem is to discover by what factor to multiply recorded baptisms in

[1] General Report, I, p. 81.

order to arrive at the probable number of actual births, it being well known that a considerable proportion of births were not registered among the baptisms. Mr. Griffith uses a constant factor of 1·15. He found that this, applied to the figures for 1825, 1830 and 1835, obliterated the jump which occurs when civil registration became effective, about 1841. This is all he tells us. The calculation is suspect from the first. Civil registration was far from effective in 1841. Farr estimated the number of births unregistered annually between 1841 and 1850 at over 38,000, and believed that, taking the period 1838–76 as a whole, 5 per cent. of the births remained unrecorded.[1] Secondly, it is certain that the ratio of births to baptisms was not constant. Mr. Griffith made the mistake of ignoring the work of Farr. The name does not even appear in his index. And yet his contribution to the subject is more important even than that of Rickman. Rickman spent infinite pains collecting and sorting the material, but Farr was its first fully competent interpreter.

In Table 61 in the Appendix to the General Report on the Census of 1871 appears a calculation—presumably the work of Farr—of the births in each decade from 1741 to 1850. The purpose of the Table is to show the age constitution of the people, and the births seem to have been estimated by working down through the age groups from a recorded figure, using Farr's Life Table, 1838–54, with an allowance for migration based on the three Censuses of 1841, 1851 and 1861. These factors are treated as constant. The results are checked by comparing the calculated and enumerated totals in the nineteenth century, and the biggest error is one of 35,000 in 1801. If we set beside these the registered baptisms and the resulting ratios we get :

TABLE II.

	Registered Baptisms. (000.)	Estimated Births. (000.)	Ratio.
1781–90	2,397	2,641	1·102
1791–00	2,618	2,988	1·142
1801–10	2,879	3,675	1·276
1811–20	3,255	4,425	1·359
1821–30	3,753	4,798	1·278
1831–40	3,966	5,289	1·334

The result differs profoundly from Mr. Griffith's constant 1·15. The fact that the latter almost agrees with Farr for the decade 1791–00 will not inspire us with confidence, since Farr's figure is

[1] *Vital Statistics*, ed. N. A. Humphreys, pp. 523 and 89.

there certainly wrong. By not allowing for the rapid decline in infant mortality about the year 1800 he has seriously underestimated the births needed to sustain the later age groups at their known level. This decline in infant mortality is attested by contemporary evidence and confirmed by modern research. Its effect is seen in the age statistics of the Censuses for 1821 and 1841. As has been pointed out in an article by the late Dr. Brownlee, to which I shall refer more fully in a moment, the high rate of increase of the age-group 20–40 between these two dates as compared with that of other groups indicates that those born in the early nineteenth century had a much better chance of survival than those born at the end of the eighteenth. Further examination of the figures shows that the decline in infant mortality became effective about 1780, reached its climax about 1800 and expired during the first decade of the nineteenth century.[1]

It follows that Farr's estimate of births for 1780–1800 must be too low, but that he is probably approximately correct for the period 1800–40. Mr. Griffith bases his whole calculation on an estimate of the ratio of births to baptisms in the years immediately before the introduction of civil registration. His estimate is 1·15, Farr's 1·334. The difference is vital, and Farr's method is, at this point, undoubtedly superior. Mr. Griffith's whole scale must therefore be abandoned. If it is correct for earlier periods it can only be so by accident.

Farr's figures must be our starting-point, but they need correction. Fortunately for historians they have been corrected by an eminent statistician. Brownlee's work on the history of the English birth- and death-rates deserves more attention than it has received.[2] His calculations are far too elaborate for summary and should be studied at first hand. He starts with the assumption that the known ratio of deaths to burials for 1838–40, namely, 1·18, can be taken as constant for the whole decade 1831–40.[3] From this, and the recorded increase of the population, he calculates the births. In working back he uses

[1] "The History of the Birth- and Death-Rates in England and Wales taken as a whole from 1570 to the present time," *Public Health*, June and July, 1916, p. 219.

[2] See also "The Health of London in the Eighteenth Century," *Proceedings of the Royal Society of Medicine*, 1925, Vol. XVIII, Epidemiology, p. 73.

[3] Mrs. Hammond's criticism of Brownlee's calculation (ECONOMIC JOURNAL, Supplement, Jan. 1928, p. 426) is mistaken. It is true that registration was compulsory in the years 1838–40. That is why Brownlee accepts the figures in the *Civil* Registers as equalling the total deaths. It is by comparison with these figures that the "leakage" in the *Parish* Registers can be measured, and the Parish Registers were not affected by the Registration Act.

the burials to estimate the correction that should be made to allow for changing mortality, and he checks the births for 1811–20 by reference to their survivors, the 0–10 age group in the 1821 Census. His correction for the high mortality of the eighteenth century is derived from the ratio between age groups in 1821 and 1841, on the lines indicated in the discussion of the fall in infant mortality. Having thus found a ratio of births to baptisms for 1791–1800, he treats it as a constant for the eighteenth century. This may give rather too high a ratio for the decade 1781–90, since at that time registration was deteriorating with the spread of Dissent. Further back I do not propose to go. Below are his ratios, with Farr's repeated for comparison.

TABLE III.

	Brownlee.	Farr.
1781–90	1·243	1·102
1791–00	1·243	1·142
1801–10	1·276	1·276
1811–20	1·272	1·359
1821–30	1·278	1·278
1831–40	1·388	1·334

The resulting birth-rates are :

TABLE IV

Birth-Rates per 1000

1781–90	37·7
1791–00	37·3
1801–10	37·5
1811–20	36·6
1821–30	36·6
1831–40	36·6
1841–50	33·9

The steady decline throughout the most active period of the Industrial Revolution disappears. Instead, we find the abnormally high rate of the late eighteenth century maintained into the first decade of the nineteenth. Even the slight drop shown from the maximum of 37·7 would be reduced if it is true, as suggested, that this figure is slightly too high. The decade 1811–20 shows a fall of one point. This is not much for a period which saw the famines of 1811–12 and the bread riots of 1816–19. The rate then remains stable till 1831–40, after which there is a sharp drop. For the third time the country was threatened with famine, and now the birth-rate seemed to have lost its buoyancy. Is it pure coincidence that this collapse followed close on the Factory Act

of 1833 and the New Poor Law of 1834? It is quite possible; but there is a *prima facie* case for the "Malthusians."

Compare with these figures the statement of Miss Blackmore and Miss Mellonie, that "the definite slump in the baptism rate comes between the years 1811 and 1821." [1] The rates per 1000 that they quote are 33·3 and 28·6. I have failed to discover how they arrive at these figures. Taking eleven-year averages about the Census year, I get rates of 30·4 and 29·5. When, on the next page, they convert baptisms into births, the slump in the rate is equally surprising, from 38·1 to 34·1. However, the quality of our surprise changes when we observe that their estimate of the births for 1821 is well below the number of recorded baptisms. But have they not themselves written, "the most deadly alternative hypothesis that can be brought up is the charge of absolute unreliability of the figures"? We are disarmed.

It must be admitted that there are peculiar causes of uncertainty in the figures for the last two decades. The recorded baptisms in the late 'thirties fall off with unnatural rapidity, except for a phenomenally high rate for 1837, which, if not a clerical error, can only be explained on the assumption that, in that year, 50,000 baby girls who normally would not have been baptised were carried to church on a wave of patriotism and christened "Victoria." Brownlee applied statistical tests which satisfied him that the baptism rate did not fall off as a result of the introduction of civil registration. The authors of the 1851 Census Report disagree. They reject the baptism figures for 1837–40 and substitute a computed average. If we take this figure and apply Farr's ratio to calculate the births in this decade, and take Farr's estimate of the deficiency in registration in the following decade, we get the following average birth-rates:

1831–40	36·9
1841–50	34·8

On this basis the drop is reduced, but it is still about twice as big as the interval between the highest and lowest rates recorded from 1780 to 1840.

We now turn to the death-rate. As there is no serious disagreement about the direction and extent of its movement, I take Brownlee's figures without question. They are based on a death-burial ratio of 1·2.

[1] *Loc. cit.*, p. 208.

TABLE V

Death-Rates per 1000

1781–90	28·6
1791–00	26·9
1801–10	23·9
1811–20	21·1
1821–30	22·6
1831–40	23·4

There is a very marked rise in the last two decades. This, it appears, is the result chiefly of higher mortality in the early years of life. Of those born 1801–21, 75 per cent. were alive at the date of the 1821 Census. Of those born 1821–41 only 71 per cent. were alive at the 1841 Census. And yet the progress of medical science had not suddenly stopped. The effects of the discoveries and improved practices of the late eighteenth century should still have been spreading through the country. The death-rate from small-pox, the principal non-economic scourge of infancy, was still declining. Porter gives a Table of smallpox mortality which, though he does not say so, is presumably for London.[1] It only shows the decline of the share of smallpox in the general death-rate, not the movement in smallpox mortality. Farr's summary for London is more useful. "In 1771–80," he writes, "not less than 5 in 1000 died annually of small-pox; in 1801–10 the mortality sank to 2; and in 1831–5 to 0·83." [2] Nor can the rise be attributed to the devastations of a new and unconquerable disease. Epidemic cholera appeared first in 1831. The mortality is unknown, but it is suggested that in London the death-rate from cholera in the period 1831–5 was no higher than it had been at the end of the seventeenth century.[3] Cholera had always taken its toll of life. The peril grew in the 'forties, and became a terrifying scourge in the seven years 1848–54, when, according to Farr, a quarter of a million people in the United Kingdom died of cholera and diarrhœa.[4] It is impossible to trace the movement in puerperal mortality. Lying-in hospitals usually include all deaths in childbed from whatever cause. General registers often include under this heading deaths consequent on childbirth only. Hospital records are not typical and vary amazingly. Mrs. George quotes, from Willan, figures for the British Lying-in Hospital showing a fall from 1 death in 42 deliveries in 1749–58 to 1 in 914 in 1799–1800.[5] This is utterly misleading, as the rate for the five years 1799–1803 was 1 in 187·5.[6] In the Dublin Hospital the rate fell from 1 in 67 for

[1] *Progress of the Nation* (1912), p. 9.
[2] *Vital Statistics*, p. 305.
[3] *Op. cit.*, p. 305.
[4] Farr, *op. cit.*, p. 352.
[5] *London Life*, p. 49.
[6] *Account of the British Lying-in Hospital*, 1808.

1761–70 to 1 in 113 for 1791–1800. It then rose again to 1 in 66 for 1811–20, and in the 'sixties was about 1 in 32.[1] Farr, writing in 1871, was prepared to accept Le Fort's statement that the average for all institutions, not only in England, was 1 in 29.[2] But the Royal Maternity Charity could show a rate of 1 in 435 for the years 1875–7.[3] Outside the hospitals we have Willan's evidence that an eminent physician lost of his private patients, between 1786 and 1800, just over 1 in 100, including all deaths in childbed,[4] and Miss Buer quotes estimates for London in 1760 and 1781 of 1 in 60 and 1 in 66,[5] which are consistent with this if Willan's friend worked only among the rich. The official figures for England and Wales, 1847–54, are 1 in 189,[6] but Matthews Duncan, after careful research, put the general rate in 1870 at 1 in 120.[7] But Duncan was distinctly pessimistic. Certainly progress was made in the eighteenth century, and it seems probable that the rate of mortality was approximately halved between 1800 and 1870. Under this head forces are favourable to a fall in the general death-rate.

Finally, we require the marriage-rate. Below I give—(A) the number of persons married per 1000 of the population, reckoned by taking twice the annual average of recorded marriages in each decade in proportion to the population on January 1st, the middle day of the decade.[8] For the eighteenth century I have used Brownlee's population estimates. (B) Mr. Griffith's marriage-rate figures, based on eleven-year averages. Mr. Griffith uses his own population estimates for the eighteenth century and Rickman's figures for the nineteenth, without allowing for the different time-intervals between the Censuses. Hence the disagreement.

TABLE VI

Marriage-Rates per 1000

	(A)	(B)
1761	17·2	16·70
1771	17·0	16·78
1781	17·5	17·20
1791	17·5	17·46
1801	17·3	17·30
1811	16·4	16·50
1821	16·2	16·16
1831	16·1	16·32
1841	15·6	15·78

[1] J. M. Duncan, *On the Mortality of Childbed*, p. 93. [2] *Op. cit.*, p. 274.
[3] *Ibid.*, p. 280. [4] *Reports on the Diseases in London*, 1801, p. 320.
[5] *Health, Wealth*, etc., p. 147. [6] Farr, p. 270. [7] *Op. cit.*, p. 24.
[8] The figures are in the Eighth Report of the Registrar-General, p. 30.

It will be observed that here the fall from the high level of the eighteenth century—a more consistent high level in my figures than in Mr. Griffith's—is steadier and more continuous than in the case of the birth-rate. In my figures it is uninterrupted. But, in interpreting this fall, we must remember that there are several possible causes of a fall in the marriage-rate which do not imply any discouragement of marriage. For instance, a steadily falling death-rate will have this effect, by increasing the average duration of married life and reducing the number of second and third marriages.[1] We know that this cause was present until about 1820. Secondly, the fall may be a mechanical after-effect of a reduction of the average age at marriage. A marriage-rate rises by anticipation and falls by postponement. It therefore moves in waves. A gradual lowering of the marriage age may produce a long wave. The rate rises at first, but, in time, automatically relapses towards its former level. For, if every girl in the country were to get married at 20 instead of, say, 25, the marriage-rate would only rise permanently in proportion to the loss by death between the two ages. It is quite possible that the hump, or wave, which has its peak about 1790, represents a change of this kind. As Mr. Griffith has shown, the late eighteenth century saw a decline of apprenticeship and of the custom of living-in, both of which had made early marriage difficult for the poorer classes.[2] The Danish Census of 1787 gives clear testimony to the importance of the factor of economic and social independence in determining the marriage age. Of males between the ages of 20 and 30 the following percentages were married or widowed in various classes: journeymen and apprentices 8·2 per cent., domestic servants 4·1 per cent., handicraftsmen (*i.e.* small masters) 62·8 per cent., "other independent" 51·4 per cent.[3] There is testimony to early marriages in the Reports on the Poor Laws.[4] This, however, is less significant. It probably expresses moral horror at juvenile weddings, whereas the fact of economic importance is that certain classes, previously obliged to postpone marriage till they were past 30, were becoming free to marry at the normal age. A fall due to this cause will not indicate that a smaller proportion of the population is marrying, and, as the

[1] Cf. *Sweden*, ed. J. Guinchard, Part I, p. 132: "We must here point out the extraordinary decline in the number of re-marriages, a circumstance which, no doubt, stands in connection with the decline in mortality."

[2] *Op. cit.*, Chap. V.

[3] M. Rubin, "Population and the Birth-Rate," *Journal of the Royal Statistical Society*, Vol. LXIII, p. 602.

[4] Griffith, *op. cit.*, Appendix II.

Census Commissioners of 1851 said, "the proportion of children to a marriage, and consequently the population, are regulated, not so much or so immediately by the numbers of the people who marry as by the age at which marriage is contracted." [1] Thirdly, the fall may be due to a declining proportion of women of marriageable age. This possibility must be examined.

We know that the population began to increase rapidly about 1780, and continued to do so, at an accelerating pace, till 1820, with a high birth-rate and a falling death-rate, particularly among infants. We should expect to find from 1791 to 1821 a rising percentage of children and a falling percentage of adults. This may prove to be the most potent cause of the steady fall in the marriage-rate. If a marriage-rate is to be taken as an index of the readiness or reluctance of the people to marry, it must be reckoned in relation only to those of marriageable age. Similarly, if the birth-rate is to be taken as an index of the extent to which the population was utilising its powers of reproduction, it must be reckoned in relation, not to the total population nor to the married women of child-bearing age, but to all women of child-bearing age. When this is done, the presumed change in the age-distribution will make the fall in the rate between 1790 and 1820 diminish, and possibly disappear, and the fall after 1820 increase. This same fact will affect the interpretation which should be put on the movements of the death-rate.

The age-distribution is also, as Miss Buer has pointed out, relevant in another way. Excess in the unproductive ages throws an extra burden on active adults. A higher productivity per head is demanded of them if the standard of life is to be maintained for the whole population. Economic distress in such circumstances may be evidence, not of an excessive aggregate population, but of a relatively diminished working population. But Miss Buer does not attempt any statistical measurement of this factor.

Our starting-point is the age-figures in the Censuses for 1821 and 1841. In the former the return of age was voluntary, but the response was wide enough to allow a reasonably accurate estimate of the whole. These can be supplemented from the Tables in the 1871 Census General Report, already referred to as the source of Farr's ratio between baptisms and births. Table 58 gives the sex and age of the population from 1801 to 1871, Table 61 gives ages only, but goes back, for the younger groups, to 1761. As the calculation is based on survival in 1821 and after, the higher ages,

[1] 1851 Census, Part II, Vol. I, p. xlvi.

60–80 and over, cannot be estimated even for 1811, and the proportion of the population covered dwindles as the date recedes. The Report describes the eighteenth-century figures as "less certain" than the nineteenth, and makes no strong claim of accuracy even for the latter. The reader is consoled by the comment that "her past is of much less practical importance than her future population to England." [1] Below I give the percentage of the population falling in the age-group 20–60 at certain dates. The figure for 1801 is taken from the above estimate, and is probably slightly too high.[2]

TABLE VII

Age-Group 20–60

	%
1801	46·3
1821	44·0
1841	47·0
1861	47·6
1871	47·1

Obviously Miss Buer's theory has foundation. The composition of the 1821 population was abnormal. Had it been divided in the same proportions as that of 1871 there would have been about 361,000 more people alive between the ages of 20 and 60. But is it obvious that this would have been an advantage? It is probably true that a population deficient in adult members is more susceptible than the average to economic stress, but it must be remembered that this deficiency was due to an excess of the young, not of the aged, and that it coincided with a rise in the economic value of the child. The Industrial Revolution did not set children working for the first time, but it certainly did increase the productivity of child labour by linking it to the machine. We hear not only of parents overworked to support their children, but also of children working to support their parents. Secondly, one of the periods of most acute distress occurred round 1841, when the deficiency had been remedied. May it not have been due to the rapid arrival of those missing thousands to swell the ranks of the adult workers? This aspect of the phenomenon is probably even more significant than that to which Miss Buer draws attention. Here is a change rapid enough to cause a crisis, its effect magnified by concentration, while the other was weakened by diffusion; an "earthquake wave of labour supply," [3] breaking

[1] *General Report*, p. xiv.

[2] My rough calculations below make it 45·9 per cent.

[3] Beveridge, *loc. cit.*, p. 466. Referring to the Edwardian age.

into a labour market already invaded by women and children and weakened by many lean years of uncertain trade. Here are two forms of pressure, both derived directly from the rate at which the population had been growing, and both calculated to exert a check on that growth, the first by emphasising the burdens of parenthood, the second by discouraging early marriage among the working class. The second was probably the stronger, and I suspect that it was an important cause of the rapid fall in the marriage-rate and birth-rate after 1830.

To measure the birth-rate and marriage-rate in proportion to those capable of marrying and giving birth, I have taken as standard the number of women aged 20–40. This fits in better with the available statistics than the more correct age-group 15–50, and it gives a satisfactory index of change. To compare with the figures given in the 1871 Census, I have made a rough calculation of the numbers in this group back to 1781, avoiding the assumption of constant mortality on which those estimates are based. The method by which I arrived at my guesses—for they are little more—is as follows :

Of the total female population living in 1801, 69·3 per cent. survived in 1821. Of the total female population living in 1821, 73·5 per cent. survived in 1841. If we assume the same ratio between the survival rates of age-groups, we can calculate from the recorded number of women aged 40–60 in 1821 that the women aged 20–40 in 1801 numbered, to the nearest thousand, 1,389,000. A similar calculation for the two sexes together makes the whole 20–40 group number 2,705,000. These estimates are likely to be on the high side. The general survival rate is influenced by the death-rate among infants, which was certainly higher in 1801 than in 1821. In the group survival rate this should not enter. It is true that within a few years from these starting-points the position was reversed, and infant mortality was higher in 1831 than in 1811, but by that time even the youngest members of the populations under consideration had left the most dangerous ages behind them. If, however, as is not unlikely, the death-rate among the old followed a similar course, this would have a compensating effect.

In an attempt to correct this error, I made a second calculation on the basis of the death-rate in the groups concerned, that is, between the ages of 20 and 60. Unfortunately the existing figures only allow a comparison between rates for the closing year of each period, based on an average of seven years about that point. We have, that is to say, burials by ages for 1818–24, and

deaths by ages for 1838–44.[1] The returns were not complete, and we have to begin with a proportional distribution of the cases where age was not given. Then the burials must be converted into deaths. As it is certain that failure to register was most common in the case of infants, we cannot apply to adults the ratio found appropriate for all ages. The crude death-rates for the seven-year periods round 1821 and 1841 were 21·8 and 21·7. If the deaths per 1000 living under five varied in the same proportion, then the ratio for converting adult burials into deaths in 1821 works out at 1·034. The resulting death-rate per 1000 living aged 20–60 for 1821 is 11·9. The corresponding rate for 1841 is 12·25. If we use this mortality ratio in place of the survival ratio used previously, we arrive at a 20–40 age-group in 1801 of 2,563,000. The same method applied to women only gives 1,316,000. These figures set the lower limit, as no ratio more favourable to the mortality of the earlier period is worth considering. As I think the second estimate is further below the mark than the first is above it, on the grounds that the fall in the death-rate from 1801 to 1821 was not all in infant mortality, while the rise from 1821 to 1841 probably was, I have made my final guess by adding two-thirds of the differences to the lower figure. The result is :

TABLE VIII

Age-Group 20–40 *in* 1801

	My Estimate. (000.)	Census Estimate. (000.)
Women	1,364	1,371
Men	1,293	1,351
Total	2,657	2,722

The journey back another twenty years to 1780 is extremely hazardous. We can fill in the age-group 40–60 in 1801 by the same method, using the ratio between survival rates just established for the 20–40 group by means of the above estimate. The result, in thousands, is 1,559. To find a ratio between the probable survival rates of the periods 1781–1801 and 1801–21 is difficult. I used the ratio between the general survival rates for the whole population as in the first estimate made of the 20–40 group in 1801. I adopted Brownlee's estimate of the 1781 population, namely, 7,531,000, and arrived at the population over 20 in 1801 by deducting from the recorded total an estimated

[1] 1831 Census, Vol. I, p. xxxviii seq. Eighth Report of Registrar-General, p. 187.

0–20 age-group, the latter being derived from the 20–40 group in 1821 by the use of the same type of ratio. The resulting figure for the age-group 20–40 in 1781 is 2,253,000. There is not enough evidence about age mortality to make correction of this figure possible, and I propose to take it as it stands, remembering that it is little more than a guess. I propose to reckon that 51 per cent. of these were women. The percentages in 1821 and 1841 were 51·61 and 51·25. This fall reflects the lower infant mortality when the second group was born. On these grounds the eighteenth-century figure should be higher still, but against this we have the heavy losses through puerperal mortality in this age-group.[1] It is probable that the percentage rose slightly from 1781 to 1821. My estimates for 1801 give 51·34. For Denmark in 1787 the percentage was 50·2, a remarkably low figure.[2] On these grounds I take 51. I have interpolated figures for 1791, 1811 and 1831 on the assumption that the same proportion of the twenty years' increment falls within the first decade in the case of the group as in the case of the whole population. The results are tabulated below.

Table IX

Age-Group 20–40

	My Estimate.			1871 Census, Tables 58 and 61.		
	(1)	(2)	(3)	(1)	(2)	(3)
1781 . . .	1,149	2,253	29·9	1,104	2,186	29·0
1791 . . .	1,242	2,427	29·4	1,219	2,414	29·3
1801 . . .	1,364	2,657	28·9	1,371	2,722	29·6
1811 . . .	1,541	2,990	28·6	1,561	3,063	29·2
1821 . . .	1,775	3,440	28·2	1,775	3,440	28·2
1831 . . .	2,157	4,187	29·8	2,136	4,181	29·7
1841 . . .	2,553	4,981	31·0	2,553	4,981	31·0

(1) Number of women in thousands.
(2) Number of both sexes in thousands.
(3) Percentage of the population contained in the age-group.
The Census Table does not distinguish the sexes for the eighteenth century. I have taken women as 50·5 per cent. as a compromise between my 51 per cent. and Farr's 50·36 per cent. for 1801.

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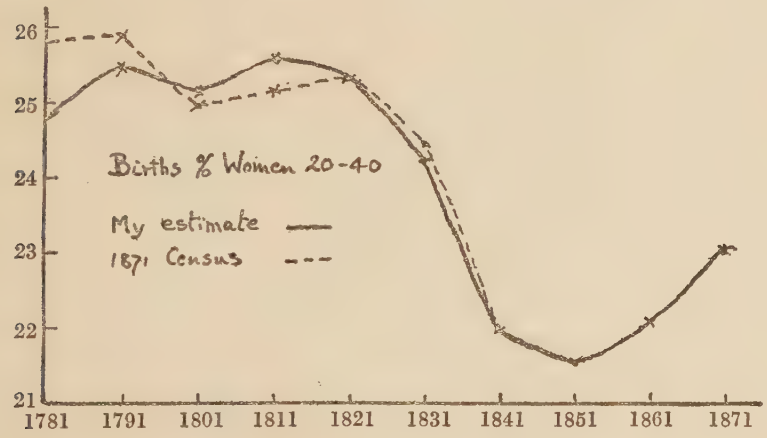
[1] Price's age mortality estimates for the eighteenth century do not bear this out, but they are based on insufficient evidence. His Table for Chester, 1772–81, shows female mortality exceeding male only at ages 28–36. His Swedish Table, 1755–76, shows no female excess, but equality from 30 to 35. (Observations on Reversionary Payments, 5th edition, Vol. II, Tables 40 and 42.) In Farr's figures for England and Wales, 1838–54, female mortality exceeds male from the age of 10 to 35. (*Op. cit.*, p. 183.) The highest excess of female over male adult mortality in the eighteenth century is found among French nuns, as compared with monks. (J. Milne, *Treatise on the Valuation of Annuities*, Table XVI.)

[2] M. Rubin, "Population and the Birth-Rate," *Journal of the Royal Statistical Society*, Vol. LXIII, p. 599.

The next Table shows the resulting birth-rates and marriage-rates in proportion to women aged 20–40, based on eleven-year averages about the Census year and Brownlee's ratio of births to baptisms.

TABLE X

	Marriages per cent. Women 20–40.		Births per cent. Women 20–40.	
	My Estimate.	1871 Census.	My Estimate.	1871 Census.
1781 . . .	5·73	5·95	24·8	25·8
1791 . . .	5·79	5·89	25·5	25·9
1801 . . .	5·82	5·79	25·2	25·0
1811 . . .	5·61	5·54	25·6	25·2
1821 . . .	5·57	5·57	25·4	25·4
1831 . . .	5·25	5·31	24·3	24·5
1841 . . .	4·93		22·0	
1851 . . .	5·27		21·6	
1861 . . .	5·35		22·1	
1871 . . .	5·44		23·1	



Although the difference between the two estimates is not great, it does affect the general character of the curves. My figures put the climax both of the birth-rate and of the marriage-rate rather later than the Census figures. This makes the period 1791–1821 mark a definite peak in the birth curve rather than the first step in a fall by stages. The result depends very much on the highly speculative eighteenth-century figures. I feel convinced that Farr was wrong in putting the 20–40 age-group in 1781 as low as 29 per cent. of the total population, lower, that is, than at any other date except 1821. Between 1750 and 1780 the rate of population growth had been low and constant, showing a slight slackening in the last decade. The percentage increases by decades, on Brownlee's estimates, were 7, 7·4 and 6·8. The birth-rate had risen by about ·5 per 1000. Brownlee's analysis

of the London Bills of Mortality shows that infant mortality fell about 1750, but rose again slightly to 1770. The big fall came between 1761–70 and 1781–90. Death-rates for the country as a whole seem to have followed a similar course, with a lag of nearly ten years. The increase caused by the first fall would, in part at least, have passed into the age-group 20–40 by 1781, while the second increase would not yet have made itself felt.

At the same time the middle ages were gaining at the expense of the old. Between 1760 and 1800 the death-rate in London for ages 10–50 fell considerably, the biggest fall being one of 15·6 per cent. at age 20–30. But the death-rate among persons over 50 rose slightly, the biggest rise being one of 5·9 per cent. at age 50–60.[1] It is reasonably certain, therefore, that the proportion of persons aged 20–40 must have been higher in 1781 than in 1801, probably higher than in 1831. I think my figure is, if anything, too low, and under-estimates the rise in the birth-rate between 1781 and 1801.

The conclusions to be drawn from this study are mostly of the nature of hypotheses, amenable to a greater or less degree to the test of detailed research. They can be summarised as follows.

1. The crude birth-rate during the whole period 1750–1830 was remarkably high as compared both with what went before and with what followed. Its climb to these heights is not altogether surprising, since it followed close on an age when the death-rate was phenomenally high and the population stationary. The maintenance of this high rate, with only insignificant fluctuations, during the last forty years of this period is, however, very surprising, in view of three circumstances—the spectacular fall in the death-rate which began about 1780, the decline in infant mortality, itself equivalent in its economic consequences to a rise in the birth-rate, and the occurrence of a succession of acute economic crises. It follows that, if we are seeking an explanation of the rapid increase of population, we must pay as much attention to the forces which kept the birth-rate up as to those which pulled the death-rate down.

2. If the birth-rate is reckoned in proportion to those capable of bearing children, its buoyancy is even more remarkable. It rose steeply till 1791 and maintained its level till 1821. Farr's estimates and my calculated figures (omitting the interpolations) agree in showing a slight rise during the first twenty years of the

[1] J. Brownlee, "The Health of London in the Eighteenth Century," *Proceedings of the Royal Society of Medicine*, 1925, Vol. XVIII. Epidemiology, pp. 73 seq. Especially Table VI.

century. Not until about 1830 did the rate relapse to the level of 1780. The births on which these high rates are based stretch from 1786 to 1826. Within these limits fall at least three severe economic crises—those associated with Speenhamland, Luddism and Peterloo. For fully half the time the country was at war and was obliged to surrender her manhood for service at sea and on the Continent, a limitation on the national reproductive powers not allowed for in a rate based on the number of adult women.

And yet the rate in the middle of the war was 18·5 per cent. higher than in 1851, and the rate for the miserable years of peace, 1816–26, was 10 per cent. higher than that for 1871, the climax of the "Golden Age."

3. The marriage-rate may have risen up to the end of the eighteenth century, but it fell in the nineteenth, and both estimates make it lower in 1821 than it had been in 1801. This suggests that either fertility rose or illegitimacy increased, probably both.[1] If it is true that the wave in the marriage curve which reaches its summit in 1801 represents a lowering of the average age at marriage, higher fertility would naturally follow. It would result immediately from the fact that young marriages are more fertile in their early years, and it would intensify with time, since young marriages have a longer child-bearing period.[2] Mr. Griffith's fertility curve,[3] which shows a steep rise from 1795 to 1815, would, on this hypothesis, exaggerate the movement, since it is based on the relation of births to marriages celebrated, and the decline in the number of the latter would not, in fact, indicate a decline in the number of married couples living. If this theory is accepted, and allowance is made for the effects of the falling death-rate, there is no need to assume a real falling-off in marriage before 1820, still less a reduction in the number of mothers, married and unmarried.

4. The crude death-rate, having reached its lowest point about 1811, began to rise a few years later, and continued to do so until the late 'thirties. This rise coincided with a change in age-distribution favourable to a low death-rate, namely, an increase in the proportion of those in healthy middle-life. It is therefore

[1] No trustworthy figures for illegitimacy exist before 1842. Rickman's estimate for 1830, from which Mr. Griffith deduces that 5 per cent. of the births were illegitimate, is far too low (p. 125). The rate for 1851–60 was 6·5 per cent., and it had been falling. (Farr, *op. cit.*, p. 101.)

[2] In 1911 the highest average number of children born *per year* in marriages of completed fertility occurred where the mother married at 17. Census, Vol. XIII, pp. 354–5.

[3] Pp. 31 and 44.

more serious than it appears. On a basis of seven-year averages, the death-rates in 1821 and 1841 were 21·8 and 21·7. Had the 1841 population been constituted, as to age and sex, in the same proportions as the 1821 population, the death-rate would have been 22·8, an increase of 5 per cent. It seems probable that this rise, most marked among infants and in the big towns,[1] was the result of economic causes, using the term broadly to cover deficiency of food-supply, housing and sanitation.

5. Somewhere between 1820 and 1830 began a definite decline both of the marriage-rate and of the birth-rate. By 1831 the birth-rate, measured in proportion to women aged 20–40, got back for the first time to the level of 1781 (this is a guess); by 1841 it had slumped far below it (this is a fact). Now it is only fair to old theories to point out how this fall by stages, slow at first and then rapid, reflects the history of child labour and the Poor Law. In the 'twenties restrictions on the employment of children had begun, though feebly, and apprenticeship was giving place to contractual labour,[2] a system which does not relieve the parent so completely of the responsibility for the child. From 1815 to 1834 the Speenhamland system was still widely in force, but the rates of relief had been drastically reduced wherever possible. Justices began to protest against the "rate in aid of wages," and in several cases it was pronounced illegal.[3] In the 'thirties came an effective Factory Act and the new Poor Law.

6. This converging of the birth- and death-rates, with its consequent check on the rate of population growth, seems to be the result of economic pressure. Now observation has shown that the death-rate is not quick to respond to the fluctuations of economic prosperity, whereas the marriage-rate and birth-rate are more sensitive. This is fully discussed, with the relevant statistics, by Mr. Yule in two articles in the *Journal of the Royal Statistical Society*.[4] In the earlier article he shows the close correlation between the marriage-rate and various indices of national prosperity, including foreign trade and employment. In the second article he examines the death-rate as well, and draws certain general conclusions. "It will be seen," he writes, "that

[1] Griffith, p. 186.

[2] Redford, *Labour Migration in England*, pp. 25–30.

[3] S. and B. Webb, *English Poor Law History*, Part I, pp. 182–9.

[4] "On the changes in the Marriage- and Birth-Rates in England and Wales during the Past Half-Century," in Vol. LXIX. "The Growth of Population and the Factors which control it," in Vol. LXXXVIII. See also R. H. Hooker, "On the Correlation of the Marriage-Rate with Trade," in Vol. LXIV.

the death-rate shows no tendency to vary inversely with trade and the marriage-rate. On the contrary, over the period 1859–1908 the prosperous periods show, on the whole, a higher death-rate than the periods corresponding to the troughs of the depressions." He concludes that "all the facts seem consonant with the view that, in recent historical times and in civilised States, it is the birth-rate that must be regarded as the regulating factor in population: no other view seems possible." [1] This may not be as true of 1800 as of 1900, but it can hardly be the exact reverse of the truth. Certainly birth-control was not widely practised, though some knowledge of it existed. Perhaps Francis Place exaggerated when, in 1822, he wrote that among the working people "the means to prevent conception" (he corrected this to "to destroy the fœtus") "is already in use to a considerable extent." [2] The heated interest shown in the subject in the early nineteenth century is no accident. It reflects both a desire to escape from the supposed pressure of population and a real conviction in some quarters that the use of undesirable methods by ignorant people constituted a serious danger to life and health. The main check, however, would probably come through the postponement of marriage. The fact that the birth-rate did fall rapidly in the 'thirties indicates that it was responsive to economic pressure. The previous rise in the death-rate suggests that this pressure was present at least in 1815, probably sooner. This thought again leads us to ask why it was that the birth-rate did not begin to fall earlier. Even if it suffered a check when the war began, it quickly recovered, and remained buoyant for another twenty years.

7. The economic pressure was in part a direct result of the rapidity of population growth. Urban concentration was a condition of this growth, and caused the high town mortality which drove up the national death-rate. The particular phenomena which acted most strongly to lower the birth-rate were, first, the burden of supporting the children saved by the declining infant mortality; secondly, the subsequent inrush of a wave of young adults into an already despondent labour market. These young people are unable to marry, and the birth-rate sags. These are both by-products of the population curve.

Such are the presumptions created and the hypotheses suggested by the general statistics of the period. So far as the

[1] Pp. 29 and 33.

[2] M. Stopes, *Contraception*, p. 273. Cf. Farr, in 1871, *op. cit.*, p. 32: "The births, again, are under control to an extent which has not yet been duly appreciated, but is now rendered clear by the Census."

Malthusians are concerned, it is evident that, whether they were right or wrong in the details of their analysis, their anxiety was abundantly justified and they were absolutely right to regard the birth-rate as the key to the situation. Things fell out as Malthus had feared. The preventive check was slow to act, and the positive check came into operation to arrest the pace of population growth. Malthus held that the failure of the preventive check was in part due to the evil influence of the Poor Law. Rickman thought that the Poor Laws were "much less conducive to an Increase of Population than they are usually stated to be in Argument," but he believed that the manufacturing population was increasing rapidly, partly "because in many Manufactures, Children are able to maintain themselves at an early age, and so entail little expense on their Parents, to the obvious encouragement of marriage." [1] On these views the general statistics cannot claim to pronounce judgment, but I hope I have shown that they can only be forced to give evidence against them under torture.

T. H. MARSHALL

London School of Economics,
December, 1927.

[1] 1821 Census, p. xxx.

JOHN STUART MILL'S ATTITUDE TOWARD NEO-MALTHUSIANISM.[1]

SINCE the war, increasing attention has been paid by economists and sociologists to population problems. During this period stimulating, and perhaps notable, advances have been made both in theory and in the collection of additional data. Yet comparatively little inquiry has been made into the history of English Neo-Malthusianism, which as a popular movement must eventually take rank in importance with Chartism, Socialism, Co-operation, the widening of the franchise, the movement for the repeal of the "taxes on knowledge," the liberation of the English Press, or with other movements of the nineteenth century which might be mentioned as having fundamental social and economic significance. One of the most interesting questions connected with the history of this agitation has been the attitude of the economists. In this paper discussion is limited to the position of J. S. Mill, which has heretofore received but scant attention.[2]

Although James Mill made it clear upon several occasions [3] that the method of control which he approved was not prudential restraint (*i.e.* postponed marriage with conduct strictly continent in the interim), but the control of births by artificial means, John Stuart Mill's attitude has remained enigmatical and contradictory. The posthumous controversy which arose immediately after Mill's death, which began, in fact, the very day of his funeral, did little to clear up the problem. On the contrary, owing to the introduction of unfounded rumour and hearsay, it left the issues more hazy. The evidence gathered at that time by the friends and defenders of Mill needs to be resifted in the light of new knowledge concerning the history of Neo-Malthusianism in the nineteenth century. Inquiry must be made not only into the

[1] This is part of a much broader inquiry into the history of English Neo-Malthusianism undertaken as a Fellow of the Social Science Research Council, to which I am greatly indebted for financial assistance. A more detailed narrative than is here possible will appear eventually in my *Documentary History of the English Birth Control Movement: 1820 to the present day.*

[2] James A. Field, "The Early Propagandist Movement in English Population Theory," *Bull. Amer. Econ. Asso.*, 4th Series, 1911, Vol. I. Pp. 207–236. Field devotes a page to Mill's relation to the early propaganda.

[3] *Colony* article in *Encyclopædia Britannica Supplement*, 8th ed., 1818. *Elements of Political Economy*, 1821, pp. 34 and 51.

truth of the charges made against Mill, but the question must be raised as to the qualifications of various protagonists to speak of the incidents they report. Above all, much new evidence on the problem needs to be presented.

The manuscript sources which one would naturally expect to prove most promising have been found to be singularly disappointing. The enormous Place Collection of guard books at the Hendon newspaper repository of the British Museum—which is one of the main sources of information on the early phases of the movement—makes practically no mention of Mill; the seventy volumes of Place manuscripts on deposit in that library refer to him only in an incidental manner. The few John Stuart Mill manuscripts in the British Museum throw no light on the problem, and the same is to be said of the collection recently acquired by the London School of Economics and Political Science. The manuscripts of speeches of young Mill delivered on the subject of population when he was about twenty reveal no clues to his opinions on the new check. Copies of these speeches I have had the pleasure of reading through the courtesy of Professor H. J. Laski, who possesses the originals. A manuscript letter of Mill's to the author of a practical Neo-Malthusian pamphlet constitutes perhaps the most direct evidence as to his position. This is now in the possession of Dr. Marie C. Stopes; it is quoted below as published by her. Though Dr. Stopes has told me that she possesses other Mill letters, I gather that they have no bearing on Mill's attitude. The collection of letters most likely to have illumined Mill's views—the correspondence between Place and Mill—has for some time been lost. It is related that Place, shortly before his death in 1854, packed up all Mill's letters (possibly with his own) and sent them by messenger to Mill, who never received them. Whether the messenger kept them or lost them is not known. George Jacob Holyoake, who informs us of this, subsequently made a concerted effort to locate them, but without avail.[1] In a different manner, letters of Mill to Holyoake, which we know positively had a direct bearing on Mill's attitude, were returned by Holyoake (for reasons which he explains fully[2]) and have never been seen since. For extracts from other letters of Mill to Holyoake I am indebted to the assistance of his daughter, Mrs. E. Holyoake Marsh.

In view of these facts my main sources have been scattered

[1] G. J. Holyoake, *Sixty Years of an Agitator's Life*, Vol. I. p. 216.

[2] G. J. Holyoake, *John Stuart Mill, as some of the Working Classes knew him . . .*, p. 26.

printed materials. There are certain scarce and therefore little known pamphlets which furnish considerable evidence; then there are the tilts which took place between Neo-Malthusian propagandists and their opponents. Though some passages, no doubt, have an indirect bearing, practically nothing of an unequivocal nature is to be found in Mill's authentic writings.

Of special interest is the literature dealing with the posthumous controversy over Mill's early Neo-Malthusian activities. It was concerned mainly with two problems:—(1) Was he as a youth mixed up in the birth-control agitation of his time, and was he probably, therefore, a Neo-Malthusian as a young man? (2) If so, did these views persist in more mature years? About these central issues clustered many minor ones which we shall have occasion to examine when we consider the nature of the charges made against him after his death by Hayward. But before the evidence is presented on the various issues to be outlined, I shall venture the briefest possible sketch of some of the more relevant aspects of the early English Neo-Malthusian propaganda. Though there is no detailed chronicle of these events now in print and they cannot be fully dealt with here, the reader will find much of interest in the able monograph by Field. After such a survey the reader will be able more safely to arrive at conclusions as to Mill's relation to these events.

I

It was exactly two decades after the publication of the second edition of Malthus' *Essay* that the early English birth-control movement began in earnest—that is, in 1823. The essay of 1798 had become an inductive treatise by 1803. But a still more notable change had been the more hopeful prospect presented by the possibility of controlling population through "moral restraint" rather than through the "positive" or death-producing checks. For a score of reasons which cannot be treated here, a relatively small group of eminent men were not long in reacting against Malthus' remedy. They preferred artificial control.

No matter who may have anticipated Francis Place by the publication of stray opinions, or even in the writing of practical pamphlets, "the radical tailor of Charing Cross" is to be considered the real founder of English Neo-Malthusianism (and, incidentally, of the movement in America). So active was he in the generalship of the propaganda that, despite the secrecy and anonymity which beclouded his movements and those of his assistants, he was soon branded as "the master spring that moves

the whole infernal machine." [1] At first, Place did the public part of the work single-handed. Later he was assisted by Carlile, John Stuart Mill and others. Several there were in high station who seemed to agree with him that it would be desirable to win the working classes over to the newly introduced preventive check, but he, almost alone, bore the brunt of the public scandal. Place boldly determined upon his course and never deviated from it, though he often became discouraged at the results he was achieving. Abuse he knew he would meet; irresponsible imputation, however, never moved him.

Place was peculiarly well equipped for his task of educating "the lower orders." His friendly contacts with leaders of the working class, especially with the editors of radical political and working-class newspapers, his native ingenuity, tact and adaptability, the background of his life experiences, his tenacity of purpose and his capacity for standing abuse—all these proved useful qualities.

Place's methods were as varied as his ingenuity was far-reaching. Shortly after the publication of his work on population,[2] which contained an epoch-marking chapter in advocacy of the artificial check as opposed to "moral restraint," Place wrote, and caused to be widely diffused, several handbills [3] presenting economic, social and medical arguments for contraception, together with practical instruction in that subject. So much resentment was aroused by them in certain quarters of the working class that they subsequently became known as the "Diabolical Handbills." These he caused to be printed in several periodicals, and they were handed about and undoubtedly distributed in other ways of which there is no record. They "circulated in thousands [R. D. Owen said in "hundreds of thousands," but that was probably an exaggeration] . . . throughout the populous districts of the North," [4] notably in Lancashire. The Spitalfields weavers received them. The metropolis itself must have been even more extensively circularized than Manchester, Bolton and the surrounding territory. The *Trades Newspaper* (which I believe Place helped to found) suspected that he was responsible for the

[1] *Bull Dog*, p. 109.

[2] *Illustrations and Proofs of the Principle of Population : including an examination of the proposed remedies of Mr. Malthus, and a reply to the objections of Mr. Godwin and others.* London : Longman, etc., 1822, pp. xv + 280. See especially Chap. VI, Section III.

[3] Norman E. Himes, "The Birth Control Handbills of 1823," *Lancet*, August 26, 1927.

[4] *Republican*, Vol. XI. p. 555.

distribution of certain tracts "which, being too small for sale, and designed besides for extensive circulation among the poorest of the community," were distributed gratuitously in the market-places "in the form of wrappers to farthing candles, and half-ounce boxes of snuff."[1] Place also sent copies of the handbills with appropriate letters to members of Parliamentary Commissions (as, for example, the one dealing with Labourers' Wages in 1824).[2] He gave away a large number of copies of his own book and of the tract of which Robert Dale Owen was the author. It would take many pages to relate his efforts, usually unsuccessful, to bring the leaders of various reform movements into agreement with him. Place's many letters on population would fill a volume. So prodigious was his activity that he had to have assistance. With young Mill I shall deal presently.

Place's most intrepid disciple was Richard Carlile,[3] who eventually produced a work which it is alleged that John Stuart Mill distributed as a part of Place's propaganda. At the time Place began to "educate" that courageous liberator of the English Press—it took several years of correspondence to bring him round to Place's point of view—Carlile was serving a thoroughly brutal sentence of £1500 fine and six years in Dorchester Gaol for the publication of Paine's *Age of Reason*. Place had no sooner convinced Carlile that he ought to back Place's pet reform when he (Carlile) published in his periodical, the *Republican* (which he was still editing in gaol), a coarse essay on Neo-Malthusianism entitled "What is Love?"[4] The demand for it was considerable, and No. 18 of Vol. XI, in which it appeared, was reprinted. That was in May 1825. By February 1826 it was reprinted in a slightly altered form as *Every Woman's Book; or, What is Love?* It, too, went through many editions,[5] including an abridged one.[6] The

[1] *Trades Newspaper and Mechanics' Weekly Journal*, August 27, 1825.

[2] Field, *op. cit.*, p. 223.

[3] No satisfactory biography has been written. The best account is G. J. Holyoake's *The Life and Character of Richard Carlile*, a pamphlet of various dates from 1849 on. Guy Aldred, the Communist, has written *Richard Carlile, Agitator: his Life and Times*, London, Pioneer Press, 1923, pp. 189. See Theophila C. Campbell's *The Battle of the Press*, and Mrs. H. B. Bonner's article in the Rationalist Press Association Annual for 1924 (pp. 53–60). The *National Dictionary of Biography* has a short account by Holyoake.

[4] *Republican*, Vol. XI. No. 18, May 6, 1825.

[5] *Ibid.*, Vol. XIII. p. 622. Fifteen hundred copies were sold within a few weeks. Carlile declared elsewhere (*op. cit.*, Vol. XIV. p. 443) that within eight months the work had sold "in its various editions to the extent of five thousand copies, with a continuing demand." Robert Dale Owen stated (*New Harmony Gazette*, October 8, 1828) that it had passed through six or eight editions.

[6] Godfrey Higgins, magistrate and author of Freethought works, abridged *Every Woman's Book* for Carlile.

historical importance of Carlile's work is to be found in the fact that, despite its crudity, *Every Woman's Book* was the first tract in the English language to discuss birth control in its economic, social and medical implications. Its significance in relation to the Mill problem will be clarified presently. The publication of the essay and of the pamphlet scandalised Place, who could hardly be considered prudish. He did his utmost to dissuade Carlile from publishing it,[1] at least in that particular form. But Carlile got out of hand. When he was about to publish *Every Woman's Book*, and when he was conducting his "War with Cobbett" over Neo-Malthusianism, he was a frequent caller on Place.[2] He would seek his counsel and then not follow it; ultimately Place came to think of him as an amiable but uncontrollable "fanatic." These, in bare outline, were the circumstances of the production of a work for the circulation and even the production of which John Stuart Mill was ultimately to be held responsible.

II

To how considerable an extent was John Stuart Mill associated with these efforts? The answer to this question is inextricably associated with the controversy which arose immediately after Mill's death.

It was on the 10th of May,1873, the very morning of the day appointed for Mill's funeral, that the London *Times* published a particularly malevolent review of Mill's career from the pen of one Abraham Hayward, Q.C. This was followed by a still more offensive document in the form of a letter addressed to an influential divine, the Rev. Stopford Brooke, which was subsequently sent to a wide circle of notables.[3] The additional charges made in the communication to Stopford Brooke were occasioned by the fact that the latter had, in a sermon delivered the Sunday following, made uncomplimentary references to Hayward's ungenerous and ill-timed attack. Since no copy of the letter to Stopford Brooke is extant, we are dependent for an account of its

[1] In a MS. note in the *Bull Dog* (No. 4, September 16, 1826), Place, below a statement of William Haley's that Place was "the author of the detestable publication of *What is Love?*" declared: "The publisher of this was Carlile's shopman, and must have known that Carlile printed 'What is Love' *in opposition to almost everybody who knew him; as especially of me*" [italics mine].

[2] See Place's Diary, Brit. Mus., Add. MSS., 35,146.

[3] Among others, the private letter was sent to Lord Stanhope, Lord Derby, Gladstone, Cardwell, Lord Monck, Beaumont, Lord O'Hagan, Monsell, Kinglake, Massey and Froude. (Letter of Hayward to Christie, in Christie, *op. cit.*, p. 30.) Perhaps its purpose was to injure the work of the Mill Memorial Committee.

contents upon the extensive reply made by W. D. Christie, C.B.[1] This gentleman, who had known Mill and his father for forty years, and who was at the time on terms of intimate friendship with James Bentham Mill, branded Hayward's second offence as "insolent to himself and libellous to Mr. Mill's memory." Incensed at the contents of both Hayward's article and his privately circulated letter (which Stopford Brooke showed him), and indignant at Hayward's refusal to furnish him the list of names to whom he had sent his letter—Christie wished to mail them a reply—Christie summarised the allegations and made a reply to them which he circulated as best he could. In furnishing information George Jacob Holyoake assisted. Subsequently Holyoake made an independent reply.

Before detailing the charges, it is not irrelevant to ask: How well qualified to speak were Hayward, Christie and Holyoake? Though Hayward seems to have been prompted by a certain amount of ill-will, *The Times* was probably hard pressed to find someone to write immediately a résumé of Mill's life. For the circulation "privately" of a curious mixture of rumour, scandal and truth there was less excuse. Moreover, the moment was inopportune; the criticism of Mill's conduct came at a time when the world of letters was uniformly mourning his loss. The resort to "private" publication—as if there ever were such a thing!—and his refusal to assist Christie in making a reply make one suspicious of the capacity of his stories to square with the facts.[2] Some of Hayward's charges in the private letter, notably his insinuations as to Mill's conduct with Mrs. Taylor prior to their marriage, are clearly false. But his allegations with regard to Mill's relation to the early propaganda rest upon more tenable grounds and are more difficult to test. Certain aspects of Hayward's estimate of Mill's career would find much more ready acceptance in informed circles to-day than would the contrary declarations of Mill's partisans made at the time of his death.

As to Christie: his long friendship with the Mill family has been noted. In regard to some of the details he can more safely be relied on than Hayward, if for no other reason than because his motives were above reproach. Nevertheless, he was strongly partisan to Mill. Holyoake went even further than Christie in

[1] W. D. Christie, C.B., *John Stuart Mill and Mr. Abraham Hayward, Q.C. A reply about Mill to the Rev. Stopford Brooke, privately circulated and actually published.* London, King, 1873, pp. 47.

[2] The fact that *The Times* refused insertion to Hayward's second story may account for his resort to "private" publication. (Jos. McCabe, *Life and Letters of George Jacob Holyoake*, Vol. II. p. 62.)

the defence of Mill against Hayward. But Holyoake's biographer, who accepted for the most part his hero's conclusions, felt that Holyoake might wisely have admitted more.[1] That co-operator's difficulties lay in recalling accurately past events and circumstances. Though he had occasional contact and some correspondence with Mill, one could hardly say that they were intimates. When Mill was attacked, Holyoake seemed to feel under obligation to defend him.

As to Hayward's charges : *The Times* article from his pen had declared that " he [Mill] must have been a boy in years when a foolish scheme for carrying out the Malthusian principle brought him under the lash of the satirist." [2] But in his privately circulated letter Hayward referred to this as a "studiously mild statement," declaring that when Mill was past twenty

> " He also fell under the notice of the police by circulating copies of *What is Love?* and flinging down the areas of houses, for the edification of the maid-servants, printed papers or broad-sheets containing practical directions for sexual intercourse without adding to the population."

Hayward added :

> " Nor was this a repented error of his youth. It was the persistent error of his mature years, and not long since he was still making converts to the same theory—a theory wholly disconnecting sexual intercourse from sentiment or love : in fact, brutalizing it." [3]

It is hardly to Hayward's credit that in an appendix to this letter he placed above a quotation from Richard Carlile's *Every Woman's Book ; or, What is Love?* the following heading : " J. S. Mill's Anti-Population Theory, the result of paternal teaching and an essential part of the philosophy of the school." No doubt this was done with the manifest intention of giving readers the utterly false impression that Carlile's book was written by Mill, his father, or some other influential member of " the school." [4]

Hayward's charges relevant to the problem in hand may be summarized as follows :

1. That Mill came to the notice of the police as a young man for distributing handbills which gave actual contraceptive

[1] McCabe, *op. cit.*, Vol. II. p. 68.
[2] *The Times*, May 10, 1873, p. 3, col. 4.
[3] Christie, *op. cit.*, pp. 8–9.
[4] *Ibid.*, p. 9.

information. (In the circular letter Carlile's pamphlet was mentioned in addition to the handbills.)

2. That as a result of this activity Mill was publicly satirised by a contemporary poet.

3. That Mill was not only a Neo-Malthusian in principle in his immature years, but that his opinions persisted throughout life.

Hayward further insinuated (but did not specifically state): (*a*) that young Mill accepted Neo-Malthusianism as a result of the teachings of his father, and (*b*) that he not only approved Carlile's book, but that he was actually connected with its authorship in such a direct way as would give him a share in the responsibility for its production.

III

Since the insinuations are more easily disposed of than the definite charges, I shall consider them first. The theory that Mill was a Neo-Malthusian because his father was presupposes, of course, that it is an established fact that Mill accepted, at least some time in his life, that point of view. For the moment let us *assume* this to be a fact. Was it entirely or mainly because of his father's influence?

Such a view overlooks the influence of other members of the Benthamite circle, notably Place, Bentham and Grote. It also makes no allowance for less personal forces.

It is, of course, true that James Mill was an avowed Neo-Malthusian and that John Stuart was educated mainly under his father's direction. But although it is undeniable that young Mill always insisted—perhaps with more generosity than truth—that his father never put any undue pressure on him to accept his opinions, one must remember that James Mill was a stern disciplinarian and a cogent supporter of his opinions. Indeed the impressionable and precocious son has admitted that he was greatly affected by his father's views on the need of radical reform in the family institution and on the social desirability of greater freedom in the relations of the sexes.[1] So that it is probably no exaggeration to say that J. S. Mill followed his father's opinions on the family as closely as he did the general trend of his father's economic views.

But this was not all owing to James Mill's influence. There is considerable reason to believe that the pros and cons of Neo-Mal-

[1] *Autobiography*, 1873, pp. 107–8.

thusianism were carefully thrashed out in disputatious gatherings of the "Philosophical Radicals" and of the Benthamite circle, and that these discussions may have influenced, either directly or indirectly, John Stuart. Place seems to gave submitted papers on the subject for their collective criticism, for, in sending an essay to the editor of the *Black Dwarf*, he remarked that it had been written "about eighteen months ago [*i.e.* about March 1822, when Place was about to publish his book on population] in consequence of objections which had been made in a pretty large circle, for the use of which it was penned, and not then intended for publication." [1] Place has also stated that his advocacy of artificial checks in the *Illustrations and Proofs* was made "with the concurrence of friends who were themselves afraid to encounter the certain obloquy of such allusions." [2] If James Mill and Ricardo did not see the manuscript before that work was published, Place once possessed a printed copy of the *Illustrations and Proofs* with their notes.[3] In connection with the extent of the discussion on this subject by the groups mentioned, and its possible influence upon young Mill, it is worthy of note that in the course of repudiating a story of Carlile's that Robert Owen, about 1818, had introduced from France the check Place made current, Owen declared that he had "no other knowledge" of the subject "than hearing it mentioned in a general conversation" after his return from the Continent, "when the sentiments advocated by Mr. Malthus on the subject of population were under discussion." [4] Owen was undoubtedly referring either to a gathering of economists or to the Benthamites. To a certain extent both groups overlapped. It is not unlikely that young Mill may have been influenced by these discussions.

Holyoake relates [5] that Carlile's essay, *What is Love?* was the subject of argument at a meeting of Mill's debating society, but I find no reference to it in the published reports. In the debate on those motions in which he participated, however, John Stuart Mill invariably supported the more radical side.

James Mill selected as his son's "political adviser" the radical reformer Francis Place, who not only founded nineteenth-century Neo-Malthusianism, but who was also so ardent a Neo-

[1] *Black Dwarf*, Vol. XI. pp. 663–4.

[2] MS. L, dated November 25, 1830, Place to MacLaren, editor of *The Scotsman*. In Place Collection, Hendon repository of Brit. Mus., Vol. LXII. p. 165.

[3] Brit. Mus., Add. MSS. 35,142, f. 18 (index).

[4] For a résumé of Owen's position, based upon recent research, see the author's article in the current (August) number of the *Quarterly Journal of Economics*.

[5] *Bygones Worth Remembering*, Vol. I. p. 268.

Malthusian as to believe that this social doctrine could not wisely be divorced from practical politics. It is undoubtedly true that Place had some influence on Mill in this direction. Had not the Place–Mill correspondence been lost we should doubtless know much more about the reciprocal influences then operating than is now possible.

Bentham was too much absorbed in his many jurisprudential reforms to take any active part in the propaganda; but he was not unfriendly to it. In fact it is highly probable that he gave whole-hearted support to the Neo-Malthusian theory then current. Certain it is that he never expressed any opposition to what he called Place's "over-population-stopping expedient," and upon one occasion defended Place when Prentice attacked him for his Neo-Malthusianism.[1] Bentham's philosophical influence upon young Mill is well known, but the master's radical views on sex have not had the same currency. More particularly it should be observed that in 1826—the notable year when Carlile published *Every Woman's Book*—Mill was a frequent caller on the founder of Utilitarianism.[2] Is it altogether unlikely that Bentham influenced the son of his most intimate disciple?

Then there was Grote. Bradlaugh's biographer is certain that he was a Neo-Malthusian.[3] He thought enough of Dr. Charles Knowlton's *Fruits of Philosophy*, one of the practical tracts circulated after 1834, to present it to the University of London.[4] He was also a regular reader of the *National Reformer*, which did more, during the years of its existence (1860–93), to advance Neo-Malthusianism than any other paper of the century. But one cannot be certain how soon Grote came to accept that point of view; he was a close friend of Mill's, but probably his influence, if he really had any, was exerted in Mill's later life.

Although Mill's father did more than anyone to shape his son's views on population—other Benthamites coming next in order of influence—there were undoubtedly other factors moulding his general attitude toward the population problem and toward Neo-Malthusianism. His mature life spanned the period of agitation from the time of the publication of Place's book (1822) almost to the Bradlaugh–Besant trial (1877–9). There is evidence (see p. 27) that he had some knowledge of the practical Neo-Malthusian tracts current between 1823 and 1870. Then

[1] Wallas, *Life of Francis Place*, pp. 81–82. [2] *Ibid.*, p. 92.

[3] H. B. Bonner, *Charles Bradlaugh: a Record of his Life and Work*, Vol. II. p. 176.

[4] *Ibid.*, Vol. II. p. 16.

there were the factors which prompted him to emphasise in his *Political Economy* the desirability of labourers having *small* families—a suggestion very closely related to the question as to the best means of attaining that end. It is important to notice that it was only a step from such a stress on small families and such an extensive eulogy of prudence to at least a *personal acceptance* (if not a *public advocacy*) of the Neo-Malthusian remedy. Mill's conclusions on the relation (or what he thought was the relation) between over-population and poverty, between too rapid child-bearing and low wages—with its train of grinding degradation and general hopelessness for the labourers—must have been the result, to a certain extent at least, of general observations. His broad sympathy and sensitivity to women's disabilities must have led him to note numerous cases in which large families had been exceedingly burdensome not alone for the bread-winner, but especially for the mothers who bore them. On the other hand, being unmarried until late in life, Mill never experienced the burden—as had his father, Francis Place, and Ensor—of trying to support a large family "while still struggling for a precarious living." Thus he could not write, as Place once did to Ensor, of "moral restraint, which has served so well in the instances of you and I—and Mill and Wakefield—mustering among us no less, I believe, than thirty-six children . . . rare fellows we to teach moral restraint!" [1]

The second insinuation of Hayward's, that Mill was connected with the authorship of *Every Woman's Book*, may be branded as absurd. It is as preposterous as the notion circulated by a prominent English writer on birth control, that Francis Place was responsible for it. It is just one more example of the capacity of the ball of rumour for enlarging as it rolls. The work is to be attributed to Richard Carlile and to him alone. Mill's reputation for refinement is too well established to credit the view—for which there is not a shred of evidence—that he had a hand in its production. Although Mill never approved the book, it is still possible to contend that he may have given his approbation to its *principle*. One may safely concur in the opinions of Christie [2] and Holyoake [3] that Mill had no share in its authorship.

To return to Hayward's main contentions (No. 2), it is an undeniable fact that Mill was satirised by the Irish poet, Thomas

[1] MS. L, Place to Ensor. Brit. Mus., Add. MSS. 35,153, f. 41, quoted by Field, *op. cit.*, p. 221.

[2] Christie, *op. cit.*, p. 11.

[3] Holyoake, *John Stuart Mill* . . ., p. 27.

Moore, for his opinions on population or for his association with the restrictive movement of the time. Moore published the following doggerel on him :

> " There are two Mr. M–lls, too, whom those that like reading
> Through all that's unreadable, call very clever :—
> And, whereas M–ll Senior, makes war on *good* breeding,
> M–ll Junior makes war on all *breeding* whatever ! " [1]

It is probable that these lines had reference to the protest of the Mills against early, improvident marriages rather than to any suspected association with the birth-control propaganda of the time. One is inclined to agree with Holyoake on this point. Such effusions were common enough in the period, and this one is probably of little significance except by way of showing that in the mind of at least one contemporary John Stuart Mill, as well as his father, was associated with the anti-population schemes then afloat. This opinion finds support in a passage to be found in a satire on Place's career which appeared in *Frazer's Magazine* in 1836. After referring to Place as " the future Moses of the preventive check," the journal added :

> " The Mount Sinai of the new lawgiver is, we need hardly say, a certain tailor's shop at Charing Cross. It was here that Johnson said he delighted to ' contemplate the full tide of human existence.' It is there Place has erected his Grand Mill-dam, for the salutary purpose of arresting this same tide. . . ." [2]

It is possible that the author of this passage had James Mill in mind rather than John Stuart. Commenting on the first of these two references, Holyoake, who took an extreme view, remarked that young Mill was unduly held responsible for his father's and Place's opinions, avowing that " it was through Mill's intimacy with Place that he came—with people who did not know the distinction between the two men—to have imputed to him opinions which were Place's only." [3]

Hayward's first charge is of more importance. Did Mill play any part in the Neo-Malthusian propaganda of the 1820's, and if so, was it a passive or an active part ? Did he distribute any of the current literature ? If so, what form did it take ? Was it one of the three forms of the " Diabolical Handbill " ? Was it the

[1] " Ode to the Goddess Ceres " in *Odes upon Cash, Corn . . .*, p. 15.
[2] *Frazer's Magazine*, Vol. XIII. p. 427.
[3] *John Stuart Mill . . .*, p. 6.

number of the *Republican* containing Carlile's essay on "What is Love?" Or was it the later revision in pamphlet form entitled *Every Woman's Book*? Although the evidence is conflicting we can be reasonably certain (1) that either Mill personally distributed some one of these, or (2) that he, being in company with others who were themselves distributing, acquiesced in such activity. What form the diffusion took is less certain and less important.

Holyoake thought, erroneously in my opinion, that Mill had no connection whatever with the early propaganda, but Christie and many others have taken a different view. It should be remembered that Christie went out of his way to defend Mill, and that the only admission he made to Hayward was this :

> ". . . it is an undeniable fact that Mr. Mill, early in life, not when he was past twenty, but when he was seventeen [1823], was, in the company with some others, interfered with by the police for the distributing of papers [*i.e.* handbills] in promotion of a scheme for artificially checking the increase of population. He was not himself distributing, but one of his companions was with his knowledge." [1]

Professor Field inclined to the view [2] that the *Trades Newspaper* had this incident in mind when it accused Place of having employed several young men to distribute copies of handbills and similar publications "at market time among the wives and daughters of mechanics and tradesmen,"

> "and which young gentlemen were, for their pains, dragged by an indignant crowd before a Magistrate, and held to bail (though, by some well-understood manœuvring, never brought to trial) for the misdemeanour . . ." [3]

There are no manuscripts in the Place Collection touching on the incident. The more important newspapers were, in their police news, uniformly quiet about it. The Clerk of Court at Bow Street informs me that the magistrate's records of the period were not sent to the Record Office and that they have been destroyed. *The Hue and Cry and Police Gazette*, however, contains for Saturday, May 24, 1823—the period when the distribution was probably at its height, and when Mill was seventeen—the following note :

[1] Christie, *op. cit.*, p. 9. [2] *Op. cit.*, p. 233.
[3] *Trades Newspaper*, September 11, 1825, cited by Field, *op. cit.*, p. 219.

> " John Francis Cavendish and his son were also charged with dropping papers [handbills ?], on which was written language of the most beastly and revolting nature, before young females, for them to pick up and read the disgusting contents. It appeared from letters found on the elder prisoner, that he had by various written applications to Noblemen and Gentlemen imposed upon them and obtained various sorts of money; . . . "

Was this an ordinary obscenity case? Did it involve others whose names were suppressed? The use of the term " papers," the description of their nature, the statement that they were dropped " before young females " (possibly down the areas of houses), suggest some parallel with Christie's admission. Are " Noblemen and Gentlemen " so likely to be involved in the purposeless distribution of obscenity as some other elements of the population? Then, again, there is no record of a subsequent prosecution. Was it dismissed because it was unimportant or for other reasons? The case is not reported in the Quarter Sessions papers; no notice of it is to be found in the more " respectable " newspapers; in fact the case never seems to have culminated in a trial. Does this lead to the suggestion of the *Trades Newspaper* (assuming that it was recalling two years later the same incident), that the case may have been " hushed " because of the association of prominent individuals with the incident? And, if so, was Mill among them? Upon some of these later points additional evidence has been gleaned from the writings of Robert Dale Owen, which is presented later (see p. 22).

Christie, after admitting that Mill was at least passively connected with the distribution, proceeded to justify him as follows:

> " He was a boy. . . . He was not past twenty, as has been studiously said for exaggeration [by Mr. Hayward] in the letter to Mr. Stopford Brooke. He was a boy of seventeen, home-bred, who had never been to a school, and had been taught entirely by his father, who undisguisedly advocated artificial means of checking population both in his article 'Colony' in the supplement to the *Encyclopædia Britannica* and later in his *Elements of Political Economy*. John Stuart Mill was young, unknowing of the world, a laborious and absorbed student, a precocious philosopher, an enthusiastic philanthropist, fearless, as youth may be, of worldly consequences; what he believed he believed, and he had the courage of his belief for

> action. . . . This distribution of papers [contraceptive handbills] was not for prurient promotion of vice. He believed it to be all-important for the good of mankind to restrain the numbers of an excessive population. The prevalence of infanticide was a social horror from which his heart shrank. In foreign highly civilized nations the artificial check was, he knew, generally practised. I am not an advocate of the views which Mill *then* [1] held and zealously endeavoured to propagate, and which were taught by his distinguished father. . . . But who is to forbid discussion and limit speculation, and say that opinions other than one's own, held by men of the intellect of James and John Mill, are not to be discussed? Who, knowing their philanthropy, can but admire their conscientious, if misguided, courage? " [2]

And again, Christie contended, this time quite unaware of Grote's attitude toward Neo-Malthusianism :

> " Mr. Mill committed, let us say, in youth an indiscretion. It was, if a mistake, a conscientious act. It brought on him ridicule, deserved or undeserved; moral reproach it could not justly bring, for he acted by the lights of his conscience, taught by a father whom he venerated, and whom great and good men admired. He might have done worse in youth, he might have committed a moral delinquency. . . . Whatever Mr. Mill did in youth he did not lose the respect of friends, *who knew the incident*, and among whom was one who may be especially named—the late George Grote. Mr. Grote's . . . friendship and respect for Mill endured to the last." [3] [Italics mine.]

The fact that Christie relates that one of Mill's most intimate friends, Grote, knew the incident is perhaps adequate testimony in itself that the story dug up by Hayward and admitted in substance by Christie is not all fiction.

Testimony as to the truth of the story of the police incident comes from two other very reliable contemporary sources—the Rev. Stopford Brooke and Herbert Spencer. The former wrote to Holyoake :

> " . . . I believe Mill was, when a boy of eighteen, taken up by the police—at Wimbledon, I think—for being one of a few

[1] Italics mine. Note that Christie implies that while Mill once held Neo-Malthusian opinions, he renounced them in later life.

[2] Christie, *op. cit.*, p. 9. [3] *Ibid.*

> men who were dispensing some instructions for cohabitation without results. From what I hear, this is true. It is one of the foolish things enthusiastic boys do . . . " [1]

The phraseology of Brooke's statement—" From what I hear, this is true "—suggests that he did not arrive at his opinion altogether independently. Yet even if the judgment was first suggested by Hayward's allegations rather than by conversation with some such person as Spencer, it still might be well founded and true.

Herbert Spencer, in an eloquent and able eulogy on Mill's moral character published in the *Examiner* immediately after Hayward's charges were made public, seems to have considered the report a " fact." In the course of this eulogy on Mill, Spencer said in part :

> " How entirely his public career has been determined by a pure and strong sympathy for his fellow-men—how entirely this sympathy has subordinated all desires for personal advantage—how little even the fear of being injured in reputation or position has deterred him from taking the course which he thought equitable or generous, ought to be manifest to every antagonist, however bitter. A generosity that might almost be called romantic was obviously the feeling prompting sundry of those courses of action which have been commented on as errors; and nothing like a true conception of him can be formed unless, along with dissent from them, there goes recognition of the fact that they resulted from the eagerness of a noble nature, impatient to rectify injustice and to further human welfare." [2]

Though Spencer has not specified Mill's " errors " (Hayward's exact term), from which he seems to dissent, it may be considered reasonably certain that he has reference to the early episodes, and possibly also to the charge that Mill was, even in mature years, a Neo-Malthusian. The repetition of Hayward's term (" errors "), the reference to a " bitter " " antagonist," and the fact that Spencer's essay was published shortly after the attack which was causing so much discussion among Mill's immediate friends, would lead one to such a conclusion.

Corroboratory of the opinions of Brooke and Spencer is the report of McCabe,[3] that Bain believed that " Mill was actually

[1] McCabe, *op. cit.*, Vol. II. pp. 63–4.

[2] *John Stuart Mill : Notices of his Life and Works* . . . London, 1873. See pp. 25–6. The passage also appears in App. G of Vol. II. of Spencer's *Autobiography*.

[3] *Op. cit.*, Vol. II. p. 64.

taking part" in the distribution of Neo-Malthusian literature "when he was apprehended by the police." In the confirmed opinion of these men Mill was active, not passive, in the propaganda.

The contemporary testimony of Robert Dale Owen as to Mill's relation to the early propaganda would seem to be worthy of considerable weight. The eldest son of the New Lanark reformer was, by virtue of his associations, in a peculiar position to know the facts. As the author of *Moral Physiology* (New York, 1830) he became America's first Neo-Malthusian. He probably knew Place personally, and I have often suspected that the English editions of Owen's tract were dedicated to him. Although Owen did not come to know Carlile personally until some few years after the publication of *Every Woman's Book*, he possessed, while residing in Indiana, a Philadelphia edition of that pamphlet. In the course of defending himself against certain false imputations in connection with Carlile's work, Owen made in the *New Harmony Gazette* (which he was co-editing with Frances Wright, who was also a Neo-Malthusian) the following statement which has an important bearing on the Mill problem before us :

> "The talented son of a talented father, a public character universally known and esteemed, throughout civilized Europe, but whose name I withhold because its publication might injure the man without benefiting the cause—bought up many hundred copies of Carlile's pamphlet, and, aided by a young friend, distributed them gratuitously in the most crowded part of London. Their doing so attracted the attention of the police, and they were brought before a magistrate. He inquired of them their names, which they gave to his surprise; asked them what could induce them to circulate such a pamphlet, and upon their replying, calmly, but firmly, 'that they had been actuated solely by a desire to assist and instruct those who stood most in need of assistance and instruction,' they were quietly dismissed by the perplexed magistrate, who would not approve, and yet knew not how to condemn their proceedings; and who feared the effect, to moral as to religious orthodoxy, of publicly associating names of such high standing with principles so heterodox." [1]

The context of this passage makes it certain that "the talented

[1] *New Harmony Gazette*, October 8, 1828. Spelling and punctuation in this and other passages have been changed.

son of a talented father" was no other than John Stuart Mill. For Owen had just referred to the elder Mill's "Colony" article. This passage, curiously enough, never appeared in any of the twenty odd editions of *Moral Physiology* which it has been my opportunity to collate. It therefore received practically no publicity save the ephemeral ones of a single insertion in the *New Harmony Gazette* together with a repetition in a scurrilous pamphlet of limited circulation attacking Owen.

In contrast to Holyoake's opinion, therefore, is the evidence of Owen, Hayward, Christie, George Grote, Stopford Brooke, Herbert Spencer and Alexander Bain. Nor were these men writers of fiction; all had disciplined minds and were not in the habit of making remarks they could not substantiate. Latterly, Professor James A. Field, a most cautious student of the history of Neo-Malthusianism, has declared: "Beyond much doubt John Stuart Mill played at least a passive part in the handbill propaganda." [1]

If we assume that it has been demonstrated that some kind of contraceptive literature was distributed either by Mill or by others in whose company he was, the question arises as to what form it took. Owen believed that it was *Every Woman's Book*; Hayward thought it was both the handbills and *What is Love?* Bain, Spencer and Brooke made no definitive statement. Christie, who was influenced by Holyoake, admitted that handbills were involved, but was sceptical about the essay or pamphlet forms being disseminated. Holyoake's zeal in defending Mill led him to maintain that Mill had no connection with any of them. While Field, whose opinion should be given the most weight, believed that it was the handbill distribution in which Mill was involved. I am inclined to agree with Field.

A reasonable case can be made out for the last contention. The handbills had an economic approach and were written in accordance with the canons of good taste. This last especially was not true of Carlile's essay and pamphlet. But a still more important consideration is this:—If the distribution took place when Mill was seventeen (Christie's view) or when he was eighteen (Brooke's opinion), this would be in the years 1823 and 1824 respectively. But the essay did not appear in the columns of the *Republican* until May 1825, and was not reprinted in pamphlet form until February 1826. This would eliminate all but the handbills. If, however, the event took place in 1825, which is in my opinion unlikely, then either the handbills or the essay might have been involved. But if one holds the latter view there would

[1] *Op. cit.*, p. 233.

still be the problem of reconciling the distribution of coarseness with Mill's inherent refinement.

It would seem quite immaterial what the *form* was. One may be reasonably certain that young Mill was involved in the distribution of contraceptive literature. I doubt if there could have been all this smoke where there was no fire. The careful thinkers who seem to have considered the incident as established were no idle scandalmongers. Nor can I bring myself to believe that they were merely reiterating a myth.

Another group of facts lends credence to the hypothesis that young Mill's relation to the early propaganda was definitive and active rather than passive or even altogether mythical. Almost assuredly the precocious John Stuart was the pseudononymous author of the *Black Dwarf* articles [1] favouring Neo-Malthusianism and signed "A. M." (by typographical error on one occasion "H. M."). The minutiæ which constitute the proof of this cannot be marshalled here owing to space considerations, but the trend of evidence may be suggested: The *Black Dwarf* discussion which Place initiated soon grew to such proportions that Place needed assistance; he therefore called upon John Stuart Mill. In the Place Collection in Place's hand are manuscript notes on the *Black Dwarf* attacks on Neo-Malthusianism, together with suggestions as to how one might reply to Wooler's arguments.[2] These papers are entitled: "Hints to John Mill to reply to Blk Dwarf—To be returned to F. P.—If you authorize me to say your reply will be forthcoming I will tell the Dwarf [*i.e.* Wooler] to omit the essay in his hands to make room for your reply." The essay by Place written under the pseudonym "A Friend to the Lower Classes" was duly postponed, as we know from an editorial note,[3] and the essay by "A. M." promptly appeared.

There are some resemblances between the suggestions made in Place's "Hints" and the arguments of the reply by "A. M." which followed. John Stuart's last rejoinder was the act of sending to the editor his father's "Colony" article; Wooler used it liberally.

John Stuart Mill has never been suspected of having been the author of these able essays. However, the late Professor Field, the greatest authority on this subject, some years ago hazarded the following guess: "Indeed 'A. M.' is so like [*James*] Mill in style as well as doctrine that but for his laudatory allusion

[1] *Black Dwarf*, Vol. XI. pp. 748–56, 791–8; Vol. XII. pp. 21–3.
[2] Vol. LXVIII. p. 117.
[3] *Black Dwarf*, Vol. XI. p. 798.

to the master one might hazard a suspicion of their identity." [1] But the "laudatory allusion to the master" was made by the reverent son of eighteen and not by the elder Mill. We may be reasonably certain that "A. M." was John Stuart Mill and not his father.

To recapitulate: There seem to be weighty reasons to believe that John Stuart Mill was not only passively associated with the early propaganda, but that he was active to the extent of being, at the age of eighteen, the author of some of the most brilliant essays on Neo-Malthusianism written in that early period.

IV

A still more important question is: Did John Stuart Mill embrace the Neo-Malthusian point of view in his mature years? Outside of Hayward's allegation that Mill's Neo-Malthusianism persisted in later years we have the more reliable statement of Alexander Bain, that "he never abandoned his inner conviction on that point." [2] As we shall see presently, certain avowed birth-controllers talked and wrote as if they *knew* that Mill accepted the principle of artificial checks. Were they illegitimately using his name, perhaps unwittingly? Some light on both questions is to be found in the printed reports of Secularist debates. But the most interesting evidence of Mill's position in mature life is to be found in one of his letters written in 1868.

Before examining these points in detail some attention should be given to the negative testimony published by Holyoake, as especially in his pamphlet, "*John Stuart Mill, as some of the Working Classes knew him.*" Owing to the unusual length of this paper it is not possible elaborately to inquire into the validity of Holyoake's conclusions. That will appear in the more complete story. Suffice it to say that in his zeal to defend Mill against Hayward's onslaught, Holyoake, who was himself a Neo-Malthusian, overshot the mark and contended: (1) that Mill was at no time during his life a Neo-Malthusian; (2) that he had no connection with the early propaganda; (3) that he never wrote a line on the subject; (4) that the handbills, which it is alleged Mill distributed, never were disseminated; (5) and that he repudiated approval of such birth-control tracts as appeared in his lifetime. Holyoake was mistaken about all these points save the last, in connection with which there were peculiar circumstances.

[1] *Op. cit.*, p. 232.

[2] Quoted by McCabe, *op. cit.*, Vol. II. p. 64.

It may be briefly stated in passing that Holyoake based his conclusions on the following considerations: (1) In the *Political Economy* Mill recommended prudence only. (2) Place had referred to Mill as "grievously wanting in thoroughness on the subject." (3) When the *Political Economy* was published, Holyoake reprinted passages in his periodical the *Reasoner*. In his introductory editorial remarks Holyoake asserted that this was "the vital question" which the authors of certain birth-control tracts had recently discussed; whereupon Mill sent him a "fierce disclaimer" of the association. Despite the first consideration one might still contend that *in his private thinking* Mill believed artificial control preferable to "moral restraint," but that he did not consider the time propitious for its public advocacy, at least by him. As to the second, it may be said that Place was accustomed to make such remarks about those who would not go all the way with him; while the incident Holyoake considers proof that Mill repudiated such publications shows only that Mill disliked an inaccurate association. Moreover, when Holyoake was quoting from Mill's letter he was doing so from memory, which has been shown upon various occasions to have been decidedly inexact. The correspondence involved had been previously returned to Mill. Then, too, the fact that Mill discountenanced the association presumes that he had some knowledge, perhaps first hand, of the tracts which Holyoake contends he thus condemned. In short, Holyoake's case has seemed singularly unconvincing. It contains, however, important elements of truth. For a more complete examination of his case I would ask the reader to bear with me until such time as more space is available for its consideration.

Further information on Mill's attitude toward birth-control in later life is to be gleaned from the reports of Secularist debates, and from the oral and written tilts which took place within the ranks of the Freethought party itself. Charles Bradlaugh, who was subsequently to gain no little notoriety by virtue of his defence with Mrs. Annie Besant of the right of republication of the Knowlton pamphlet, had upon several occasions linked Mill's name with Neo-Malthusianism, and implied that he approved artificial methods of controlling population. This took place in the early 'sixties. When Bradlaugh's co-editor of the *National Reformer*, Joseph Barker, challenged him on the point, Bradlaugh summoned to his aid "G. R." ("George Rex," *i.e.* Dr. George Drysdale, author of *The Elements of Social Science* and frequent contributor on Neo-Malthusianism to the columns of that journal), but Drysdale failed to clarify and substantiate the thesis. Despite a

certain amount of intimacy with Mill, I doubt if Bradlaugh had first-hand knowledge that Mill privately agreed with him. Yet that is possible. It would seem more probable that this was one point at least on which Barker had Bradlaugh cornered—though, of course, Bradlaugh would not admit as much to one with whom he finally had to sever relations. Part of the confusion doubtless arose from the fact that the more exact term "Neo-Malthusianism" had not been coined so early as this, and that the word "Malthusianism" was used indiscriminately. Even Bain fell into this error. Thus, if Mill had made any *public* utterance of approval, Bradlaugh failed to cite it.

In like manner, when Bradlaugh was debating in 1870 with the Rev. David King, Birmingham evangelist, Mill's name was used in such a way as to suggest that Mill approved his (*i.e.* Bradlaugh's) Neo-Malthusian views. Upon being pressed by King, Bradlaugh again dodged the real point at issue and failed to make an unequivocal statement as to Mill's position.

The ultra-radical *Elements of Social Science* was for ever causing heated debate. It was dragged into the Bradlaugh–King debate for the reasons just suggested. When the debate was over, King wrote Mill to secure a statement. His answer was inserted by King in the published report:

[(Oct.?) 1870.]

"DEAR SIR,—I have most certainly never on any occasion whatever, in public or private, expressed any approbation of the book entitled *Elements of Social Science*. Nor am I likely ever to have done so, inasmuch as I very strongly object to some of the opinions expressed in it. You are therefore quite at liberty to say that I am not correctly represented by anyone who asserts that I have commended the book.

"Yours very faithfully,
"J. S. MILL."[1]

Although both King and Varley, the Christian Evidence lecturer, have cited this letter as conclusive evidence that Mill did not approve the book as a whole—which, indeed, could have been established on theoretical grounds—it should be noted that the reply left untouched the question as to whether Mill approved or disapproved of the Neo-Malthusian views there expressed. Mill

[1] King–Bradlaugh debate, App. No. 5. The letter is reprinted by Henry Varley in *Mr. Bradlaugh Proved Utterly Unfit to Represent the English Constituency . . .* London, May 1884, p. 9.

was careful to state that he strongly objected to "some" of the author's opinions; it would have been strange indeed had he sanctioned *all* the heterodox views on sex which Drysdale launched in that provocative book and in that stormy period. Nevertheless, both King and Varley have used the statement to disprove what Bradlaugh implied, namely, that Mill was a Neo-Malthusian. At least the readers of King and Varley would most certainly draw that conclusion; whereas only two conclusions can legitimately be inferred from the Mill letter: (1) that Mill never commended the book, and (2) that he was not in *entire* accord with the views of its author. On Neo-Malthusianism the letter was non-committal. Now it happens that most of the criticism focussed upon the *Elements* from its first publication in 1854 down through the 'eighties was levelled against the birth-control views there ventured. In this connection one wonders whether King was merely trying to find out whether Mill had approved the *Elements* or whether he did not also wish to eke out of Mill a declaration against Neo-Malthusianism—for that doctrine made King see red. The manner in which the letter was subsequently used would suggest that the latter purpose was paramount. If so, did Mill suspect as much? Whether my speculations are correct or not, it is certain that Mill refused to make an unequivocal declaration against it.

Fortunately there is one letter of Mill's in existence which goes a long way toward clarifying his position in mature life. It was in 1868, five years before his death, and two years before the above letter was probably written, that Mill wrote a significant letter to one Haslam of Dublin, who, under the pseudonym of "Œdipus," had privately printed and circulated a pamphlet on *The Marriage Problem* which dealt frankly with family limitation in its medical and physiological aspects. In acknowledging receipt of a copy Mill wrote to Haslam as follows:

"*February* 19, 1868.

> "I thank you for your pamphlet. Nothing can be more important than the question to which it relates, nor more laudable than the purpose it has in view. About the expediency of putting it into circulation in however quiet a manner you are the best judge. My opinion is that the morality of the matter lies wholly between married people themselves, and that such facts as those which the pamphlet communicates ought to be made known to them by their medical advisers. But we are very far from that point at

present, and in the meantime everyone must act according to his own judgment of what is prudent and right.

"J. S. MILL." [1]

The most striking sentiments which Mill here expresses are the opinions, (1) that the use or non-use of artificial methods of control is a matter for the private judgment of the married people concerned; and (2) that such information should be made available by counsel with medical men. Though Mill seems to be sceptical about the advisability of putting such information into general circulation, he refers to the purpose of the pamphlet as "laudable." One might infer from Mill's social philosophy that he would not restrict the knowledge to one social class. Whether he would have limited dissemination to the channel of the medical profession alone is more doubtful; I am inclined to the opinion that he would have permitted decent and temperate publication as well. But however that may be, one is safe in concluding that in Mill's view the parties themselves were to be the sole judges of the morality of such conduct.

All this is interesting in view of the fact that *publicly* Mill always wrote and talked as if he wished to exceed Malthus' demands for self-denial, and apply *within* the marriage bond the restraints which Malthus dared insist upon only *up to* the threshold of the married state. Publicly, Mill insisted that the same control should be exercised after marriage as before; he argued, that is, for continence. How is one to reconcile this clear-cut, commonly understood position with what seems to have been his closely-guarded, private judgment?

The solution of this dilemma is not so difficult as it first appears. Possible reasons why Mill was not more outspoken are not far to seek. (1) He was intensely preoccupied with other matters. He may well have felt that if he ever publicly took up such a position it would have needed much explanation in his day, when the discussion of sex matters was studiously avoided. (2) As matters stood, his relations with Mrs. Taylor were the subject of gossip, and were very much misunderstood even by members of his family and by rather intimate friends. Had he been a public advocate of birth-control, what extraordinary credence would have been lent to the accusations already afloat! (3) A public advocacy of Neo-Malthusianism would have impeded the realisation of many of the other objectives and reforms for which Mill cared

[1] Marie C. Stopes, *Early Days of Birth Control*, p. 12. It also appears in *Contraception*, 1st ed., p. 291; 2nd ed., p. 330.

intensely in later life, *e.g.* woman suffrage and the emancipation of women. (4) Mill had a keen sense of the delicate; he did not like to offend even when he thought he was right; being of a quiet and retiring nature he did not like to obtrude himself by making his personality conspicuous. He would have done both had he publicly taken such a position. (5) I think Mill was definitely in favour of the artificial check, but I do not think that he held the opinion strongly. He was the reverse of the dogmatist and tended toward the eclectic. He was probably aware of certain limitations in the doctrine. Bain believed that he was " below average " " in the so-called sensual feelings . . . and that he scarcely did justice to them in his theories." For although he was not an ascetic, " he made light of the difficulty of controlling the sexual appetite," [1] especially by those living in the intimacies of married life. Only once did he swing in the other direction and refer with feeling to " the tender relation of the sexes, which constitutes the great charm and aroma of existence. . . . " [2] Generally he under-estimated the difficulties of control; and this probably accounts for the diluted vigour with which his Neo-Malthusian views seem to have been held. (6) Moreover, Mill may have thought that the time had not yet arrived when he could usefully take up a firm stand publicly. I think he realised that after all public opinion had not advanced much since 1823. Was he prepared to submit to the abuse Francis Place received? Place had been accused of every crime on the Newgate Calender except assassination. And, did not Mill have enough heresies already? Why should he walk where a half-indifferent, half-recalcitrant but respectable medical profession feared to tread? Was it not even more their province than that of an economist? Was there not just a tinge of pessimism—perhaps suggestive of his position—in his remark to Haslam, that "we are very far" at present from getting the co-operation of medical men? Moreover, what was to be gained by public advocacy? Had he not already gone further in frankly discussing the subject than any other economist who preceded him save perhaps Malthus? Had he not had enough of the limelight as a young man when he was associated with the propaganda? Had not the secrecy attempted in that period been more or less of a failure? If he wrote frankly on Neo-Malthusianism in mature life, would it not, despite safeguards, get round that he was the real

[1] Alexander Bain, *John Stuart Mill: a Criticism; with Personal Recollections*. London, 1882, p. 149.

[2] *Oration on Swedenborg*.

author? If so, would he be prepared to take the consequences? And would it not have rendered nugatory his promotion of other equally useful ends? Who can say that such reflections did not influence Mill?

If Mill put a quietus on his real opinion on birth-control, there is precedent for this conduct in his behaviour in not making his religious views public until after his death. Though there were suggestions of heterodox religious opinions in the works published prior to 1873, it is unquestionably true that the radical nature of his attitude toward religion was not generally realised until the posthumous publication of the *Autobiography*. So enigmatical was his real position that some Liberal papers thought he was more or less dishonest in not declaring openly his real beliefs. But it was not dishonesty—far from it; this conduct arose from the conviction that it was nobody's business but his own what his religious opinions were. Mill let this be known when electors wanted to know whether or not he was an atheist. Just as he was reluctant to express himself fully on religious matters, so there would seem to be some ground for supposing that he withheld some of his opinions on the population question.

I have suggested that perhaps Mill held his Neo-Malthusian views diffidently. On the other hand, he often expressed the more commonly accepted Malthusian opinions with no little vigour. Passages will occur to the reader; but it is not so generally known that Mill at one time, despite his great passion for individual liberty, urged *legislation* against improvident marriages on the ground that the procreation of children was not a "self-regarding" act; others besides the procreators were involved—new lives. It is not easy to reconcile the firmness with which he held this opinion with what seems to have been a definite but diluted Neo-Malthusianism in mature years; unless perchance he gave up the former opinion upon asking himself: "But what if children should not be the result of such a marriage?" Under such circumstances would not Mill have been obliged to infer from his general philosophy that so long as "improvident" partners did not affect adversely the interests of others by marrying early on an inadequate income and producing children they could not care for, the intimate associations of married people concerned themselves alone?

Another reason for the diffidence with which Mill seems to have held to this body of opinion may well have arisen from the realisation that the medical and physiological aspects of the question were quite beyond his province. After all, not much was known about the subject in Mill's day. The feeling that

certain phases of the question were beyond his depth (especially the medical) had deterred Robert Dale Owen from writing his treatise for many months. He tells us that he finally wrote *Moral Physiology* partly with the purpose of defending himself against unjust accusations which were being levelled against him for having ventured even the briefest and most temperate public statement. Undoubtedly Mill shared Owen's diffidence, and perhaps for similar reasons. What is more, he had the experiences of Owen and Place to look back upon.

It may be contended that these suggestions are but plausible excuses for the non-activity of Mill in later life. For myself, I cannot believe so. On the contrary, I would venture the opinion that Mill weighed with care the considerations for and against associating his name with Neo-Malthusianism, and that he deliberately determined upon a policy of not discussing publicly this particular private opinion.

There are doubtless other interpretations of the incidents and circumstances here related. But if this paper has assisted in lifting, even partially, that " veil of ambiguity " which, in the words of that great Mill scholar, Alexander Bain, has always enshrouded Mill's inner meaning on this subject, its purpose will have been achieved. It is to be hoped, however, that the main contentions have been clearly established, to wit: (1) that John Stuart Mill as a young man played at least a passive, if not an active, rôle in the distribution of practical literature and that he was active in the early propaganda, at least to the extent of writing on the subject with the purpose in mind of influencing the working classes; and (2) that Mill accepted in mature life the Neo-Malthusian principle, but entertained it diffidently as a private opinion, preferring not to embark upon any public advocacy.

NORMAN E. HIMES

NOTE.—Owing to space considerations it has been necessary to omit much detailed critical documentation.

THE PIONEERS OF BANKING IN ENGLAND [1]

Out of the business of dealing in foreign moneys, a business indispensable to the traders who frequented the great mediæval continental fairs, there had emerged before the thirteenth century not only a system of offsetting mercantile debts, but also the method of assigning these debts by means of the bill of exchange. Before the third decade of the fourteenth century the Venetian money-changers had developed into recognised keepers of deposits, while a little later they were settling the debts of their customers by book transfers of credit.[2] "It is tolerably clear," writes a well-known authority,[3] "that private banking began in Venice as an adjunct of the business of the *campsores*, or dealers in foreign moneys." The money-changers, *changeurs*, or *campsores*, were the exchange specialists and financial intermediaries of mediæval Europe; the fairs were their clearing houses.

The assigning of mercantile debts by means of the bill of exchange was practised in England in the fourteenth century by merchants of continental extraction,[4] the wealthiest of whom were important royal money-lenders.[5] But though the English-

[1] The following abbreviations are used in this article: B.M., the British Museum; P.R.O., the Public Record Office; Addit., Additional Manuscripts; Ch. P., Chancery Proceedings; Eng. Reps. Ch., *The English Reports* (*Chancery*); *D.N.B.*, *Dictionary of National Biography*; *H.M.C.R.*, *Historical Manuscripts Commission*, *Reports*; Harl., Harleian Manuscripts; Lansd., Lansdowne Manuscripts; Recs. Ex. R., Records of the Exchequer of Receipt; *Reps. D.K.P.R.*, *Reports of the Deputy Keeper of Public Records*; Salk., Salkeld, *Reports*; S.P. Dom., State Papers, Domestic; S.P. For., State Papers, Foreign; Ex. Accs. V., Exchequer Accounts, Various. The Acts of Parliament referred to are quoted from the *Statutes at Large*.

[2] See E. Lattes, *La Liberta delle banche a Venezia dal secole XIII al XVII secondo i documenti inediti del R. Archivo dei Frari* (1869), pp. 26–29; F. Ferrara, "Gli antichi banchi di Venezia," in *Nuova Antologia*, XVI. (1871), pp. 435–466; and P. Huvelin, *Le Droit des Marchés et des Foires* (1897), pp. 534–537.

[3] C. F. Dunbar, "The Bank of Venice," *The Quarterly Journal of Economics*, VI. (1892), p. 310, and *Economic Essays* (1904), p. 145.

[4] See A. H. Thomas, *Calendar of Early Mayor's Court Rolls preserved among the Archives of the Corporation of the City of London* (1924), pp. 94, 200–201.

[5] For the operations of Italian financiers in pre-Tudor days see Sir Edward A. Bond, "Extracts from the Liberate Roll relative to Loans supplied by Italian Merchants to the Kings of England in the Thirteenth and Fourteenth Centuries," *Archæologia*, XXVIII. (1839), pp. 207–326; R. J. Whitwell, "Italian Bankers and the English Crown," *Trans. R. Hist. S.*, New Series, XVII. (1903); W. E. Rhodes, "The Italian Bankers in England and their Loans to Edward I and Edward II," in T. F. Tout and J. Tait, *Historical Essays* (1907).

man was using this instrument with increasing frequency before the end of the following century,[1] he does not appear to have carried out any major operations in the "business of exchange" prior to the age of the Tudors. With, however, the expansion of England's trade during the latter part of the Tudor period the transactions of Englishmen in this particular sphere increased so rapidly that by the end of the Tudor régime they were of an outstanding nature. It is, therefore, not surprising to find during the reigns of Elizabeth and James I certain English business men gradually developing into recognised money-lenders, money-changers, bullion merchants, exchange specialists, and financial middlemen.

Of these business men four types—the merchant, the broker, the scrivener and the goldsmith—became prominent as financial intermediaries. They are the pioneers of the banker's trade in England; the origins of English banking must be sought for in their transactions.

Even in the early years of Elizabeth's reign the term banker, connoting an exchange specialist, was in use in England, and the Elizabethan traders and writers were well acquainted with the operations of these specialists. In 1572 that remarkable critic of the financiers of the day, Dr. Thomas Wilson, carefully examined, in his earnest and thorough *Discourse uppon Usurye*, the methods of "bankers and exchangers,"[2] while eight years before the publication of this learned treatise another observant English economic writer described in detail how "the bankers do cunningly fall the exchange at Antwerp."[3]

But the transactions of the Antwerpian bankers were of an extensive nature much earlier in the sixteenth century than the reign of Elizabeth. The Flemish loan negotiations of Sir Stephen Vaughan during his tenure of the office of Royal Agent are striking evidence of the extent of these transactions in the first half of the sixteenth century.[4] "Two days ago," wrote the Queen of Hungary on 25th May, 1544, to the Imperial Ambassador in

[1] In the reign of Edward IV, for instance, by the merchants of the Staple. See *The Cely Papers*, 1475–88 (1900), (ed. by H. E. Malden for R. Hist. S.), No. 128; and *The Stonor Letters and Papers*, 1290–1483 (1919), (ed. by C. L. Kingsford for R. Hist. S.), Nos. 150 and 223. Also E. Power, "The English Wool Trade in the Reign of Edward IV," *Cambridge Historical Journal*, II. No. 1 (1926).

[2] P. 114 *b*.

[3] B.M. Harl. MS., 660, fol. 107.

[4] That the overseas financial operations of the Tudor royal agents were extensive in the first half of the sixteenth century is proved by the fact that at one time the annual interest on Henry VIII's Flemish loans amounted to £40,000. See J. W. Burgon, *The Life and Times of Sir Thomas Gresham* (1839), I. p. 68.

London with reference to Vaughan's arrival in the Low Countries, "came one who calls himself the King's Commissioner and seeks in Antwerp to raise for the King [Henry VIII] 100,000 ducats monthly." [1] An interesting letter written by Vaughan, which describes how this loan was obtained,[2] is a typical illustration of the dealings of the Tudor royal agents with the continental bankers.[3]

In Vaughan's time the securities usually accepted by the bankers of Antwerp for English loans were those of Italian mercantile firms established in London, such as the houses of Vivalde and Bonvyce.[4] This is evidence of an exotic predominance in the embryonic London money market of the first half of the sixteenth century, a predominance which declined in the second half of the same century when Englishmen began to play an important part in international finance. Sometimes, however, even in the first half of this century, English merchants and members of the Privy Council guaranteed the integrity of the Italian house in London whose securities for loans were accepted in Antwerp.[5]

Antwerp reached the height of its prosperity between 1500 and 1560,[6] and during this important period of European commercial expansion its great financial magnates, the Fuggers, Hochstetters, Welsers, Schetzes, Dowckes, Tuckers, Lixhalls, Fleachamores, Van Dalls, Prowens, Hoffemans, Lyndenas and Rantzaviuses appear to have been always ready to negotiate with the English royal agent.

The wealthiest of these continental financiers were the Fuggers

[1] *Letters and Papers, Foreign and Domestic, of the Reign of Henry VIII*, arranged and catalogued by J. Gairdner and R.H. Brodie, XIX., Pt. I. 578.

[2] *Ibid.*, XIX., Pt. I. p. 630.

[3] For a detailed examination of the activities of Vaughan see F. C. Dietz, *English Government Finance, 1485–1558* (1920), pp. 167–174. See also R. H. Tawney and E. Power, *Tudor Economic Documents* (1924), II. pp. 138–42.

[4] *L. and P., op. cit.*, XIX., Pt. I. 759. For other Italian mercantile houses in London "known and abled upon" the Antwerp Bourse see *ibid.*, XIX., Pt. I. 725.

[5] *L. and P., op. cit.*, XIX., Pt. I. 759.

[6] For a description by modern writers of Antwerp at the height of its prosperity see Burgon, *op. cit.*, I. pp. 75–7; R. Ehrenburg, *Das Zeitalter der Fugger* (1896), II. pp. 3–69; J. L. Motley, *The Rise of the Dutch Republic* (1885), I. 95–8; H. Pirenne, *Histoire de Belgique* (1900–20), II. pp. 399–403, and III. pp. 259–72; and R. H. Tawney, *Religion and the Rise of Capitalism* (1926), pp. 73–6.

A contemporary writer, L. Guicciardini, *Descrittione di tutti Paesi Bassi, altrimente detti Germania inferiore* (Antwerp, 1567), pp. 82–115, gives a detailed description of Antwerp and its merchant houses. For a lengthy excerpt relating to the trade of Antwerp from the French translation of this work see Tawney and Power, *op. cit.*, III. pp. 149–73.

of Augsburg.[1] "The Fugger is never from me," wrote Vaughan to the English Privy Council in September 1546, "the house of Bonvyce . . . pulls me hourly by the sleeve";[2] and it was with the firm of Fugger, which by 1508 had established an agency in Antwerp, that more than one of the English royal agents, particularly Sir Thomas Gresham, the greatest of them all, conducted large transactions.

Gresham[3] commenced his loan operations in Antwerp in 1552, operations which have been described in great detail by Burgon.[4] During the ensuing fifteen years, with the assistance of Sir Richard Clough, his able and zealous Welsh "factor," he raised in this great financial centre many large loans for the Tudors. Before 1570 this famous "Court banker of Elizabeth"[5] had also succeeded in obtaining very substantial State loans in London, loans which are of considerable importance in the genesis of the London money market,[6] and which prove that by the

[1] For the House of Fugger see W. Jacob, *An Historical Inquiry into the Production and Consumption of the Precious Metals* (1831), II. p. 26, *et seq.*; Ehrenburg, *op. cit.*, I. pp. 85–186; Burgon, *op. cit.*, pp. 60–63; A. Stauber, *Das Haus Fugger* (1900); P. van Dyke, "A Captain of Industry in the Sixteenth Century," *Harper's Magazine*, European ed. 59 (1909–10), pp. 276–84; V. von Klarwill, *The Fugger Newsletters* (1924); and *ibid.*, Second Series (1926).

There are numerous references to the transactions of the Fuggers in *L. and P.*, *op. cit.*

A detailed list of recent works dealing with the history of the Fuggers is given in the *Economic History Review*, Vol. I. No. 2 (January 1928), p. 342.

[2] *L. and P.*, *op. cit.*, XXI., Pt. II. 51.

[3] For the career of Gresham, see *D.N.B.* See also Burgon, *op. cit.*, and H. R. Fox Bourne, *Famous London Merchants* (1890), Chap. II.

[4] *Life and Times*, *op. cit.* See also H. Buckley, "Sir Thomas Gresham and the Foreign Exchanges," Economic Journal, XXXIV. (1924), pp. 589–601.

Among a large number of contemporary documents dealing with the overseas financial transactions of Gresham the following are interesting: S.P. For., Eliz. 14, dated 12th May, 1560; 15, dated 24th June, 1560; 30, dated 2nd September, 1561; 30, dated 8th September, 1561; 40, dated 11th August, 1562; 40, dated 16th August, 1563.

A number of Elizabeth's letters to Gresham are contained in B.M., Addit. MS., 5,755.

[5] B.M., Addit. MS., 5,755.

[6] Evidence of the increasing importance of London as a monetary centre is contained in an interesting letter from Gresham to Cecil, dated Antwerp, 12th May, 1560. Gresham states that he is confident that large loans for the use of the State could be raised in England at interest not exceeding 5 per cent. S.P. For., Eliz., 14.

A little later in the same year Gresham informed Cecil of the large number of bankruptcies in Antwerp, the most startling being those of Lixhall and Fleachamore (*ibid.*, 14, letter dated 30th August, 1560); and in September 1561 he reported a great scarcity of money in Antwerp (*ibid.*, 30, letter 2nd September, 1561).

See also *Cal. S.P. For., Eliz.*, 1569–71, No. 1416, p. 373, and No. 1755, p. 463.

'sixties of the sixteenth century Englishmen undoubtedly possessed the power to engage in high finance.

The surviving records of Gresham's financial activities in the City of London show that he obtained large sums for the use of the State from Englishmen. The following interesting item [1] illustrates his method of recording these London loans :

> Item of S^r^ Rog^r^ Martenn,[2] Knyght, the xxvj daie of Novemb^r^ 1569 to paie the xxvi daie of Maye an^o^ 1570 the somme of xvc^li^ : more for the brokerage after one p cento some xv^li^, more for thinterest after vj upon the hundrethe for vj monethes some $\overset{xx}{\text{iiij}}$ xi^li^ . . . . . lmvjcvj^li^

There is a great deal of further documentary evidence relating to the flotation of State loans in the London of Elizabeth. In a list, for example, of London residents who in 1589 contributed to a royal loan of £15,000 at 10 per cent.[3] there are over a hundred subscribers, Englishmen with hardly an exception. Still later Elizabethan loans lists, compiled by the actual royal "collectors," show that in the last decade of the sixteenth century large sums were raised in London by means of the Privy Seal demand note,[4] "loanes," as they were termed, "upon Privie Seales." [5] These well-preserved later lists [6] are cogent proofs of the capacity of Englishmen as contributors to State loans in Elizabethan times,

[1] From B.M., Lansd. MS., 12, fols. 28–29. Even so early as 1561 a loan of £30,000 at 10 per cent. was raised for Elizabeth in London. This sum was obtained from twelve Englishmen. S.P. Dom., Eliz., 19, 2.

[2] A London "mercer," *i.e.* general merchant, who became Lord Mayor in 1567.

[3] B.M., Lansd. MS., 60, fol. 45.

[4] The Tudor Privy Seal demand note was a written or printed form (usually printed) which was presented by the royal "collectors" to potential lenders as a demand for a loan. After the loan was obtained the amount was entered on the note by the collector. It then functioned as a receipt, and when the loan was due for repayment the lender or "his assignes" presented the note at the Exchequer of Receipt (*i.e.* the department of the Exchequer which was concerned with the actual receipt and expenditure of revenue; the audit department was known as the Exchequer of Account).

These notes were therefore assignable instruments, and among the surviving specimens (P.R.O., Recs. Ex. R., E 401/2590) there is evidence which shows that they were transferred from person to person by indorsement. The holder could, also, under power of attorney receive payment through a representative.

For further information about the Privy Seal demand note see R. D. Richards, "The Evolution of Paper Money in England," *The Quarterly Journal of Economics*, Vol. XLI., May 1927.

[5] Many details of "loanes upon Privie Seales" will be found in the Elizabethan State Papers, Domestic. See also B.M., Addit. MS., 27,877 (dated 1611–12).

[6] Particularly in P.R.O., Recs. Ex. R., E 401/2590, a parcel which contains several Elizabethan lists of receipts of "money upon Privy Seales."

and of the striking development of London as a monetary centre after the eclipse of Antwerp and its famous Bourse.

The surviving royal "collectors" lists of the subscribers to the State loans,[1] and the Wardens' Accounts and Court Minute Books of the Goldsmiths' Company of London,[2] contain numerous illustrations of the financial activities of Elizabethan merchants and goldsmiths.[3] There are, also, a number of contemporary documents among the Records of the Exchequer of Receipt which show that certain of the later Tudor goldsmiths were important bullion merchants.[4] It was this type of goldsmith—craftsman, bullion merchant, and money-lender—who was the immediate forerunner of the goldsmith banker of Stuart London, a banker who became generally recognised in the metropolis and in the provinces as a keeper of deposits, an issuer of promissory notes, and a dealer in bills of exchange and various types of Treasury-Exchequer money orders.

But it does not appear from the available contemporary evidence that the goldsmiths were outstanding figures in the London money market of Elizabethan and Jacobean times. Though always ready to lend money for a "consideration," the Kaylls, Martins, Hoares, Heriots, Spilmans and Williamses, and the lesser goldsmiths of the reigns of Elizabeth and James I were primarily jewellers and lapidaries, makers and sellers of gold and silver ware, cutters and vendors of precious stones. Their financial activities were overshadowed by those of the merchants, the brokers, and the scriveners. In the last decade of the Tudor period the English "exchanging" merchants carried out large operations in bills of exchange, and in the actual transference of coin and bullion from England to France and Flanders or from these countries to England. "These Bankers, these money men, and these merchants," writes Wilson, "doe set what price they list of money and make it eyther of highe value, or meane value as they please, for their owne singular commoditie and private gaine." [5]

[1] It must also be noted that a kind of promissory note, termed a bill obligatory, was sometimes given by a royal financial intermediary as a sealed acknowledgment of a loan. Specimens of these will be found in B.M., Lansd. MS., 32, fols. 21–44.

[2] Preserved in Goldsmiths' Hall, London.

[3] See, for example, W. S. Prideaux, *Memorials of the Goldsmiths' Company* (1896–7), *passim*.

[4] *E.g.* Sir Richard Martin's transactions, P.R.O., Ex. Accs. V., E 101, Bdles 296/4, 304/12; and those of Sir Martin Bowes, *ibid.*, Bdles 302/24 and 27, 303/5, 7 and 8.

[5] *Discourse uppon Usurye*, fol. 114 *b*.

Both in the State Papers and in the Records of the Exchequer of Receipt appertaining to the reigns of Elizabeth and James I there are many instances of the large transactions of English merchants in the business of "delivering money beyond the seas by bills of exchange." Among several references to these operations in the former documents is a special report, submitted to Burghley in 1597, which deals with the affairs of William Beecher, whose profits as an exchange specialist amounted in a comparatively short time to £40,000.[1] But the evidence among the latter documents is overwhelming proof of the fact that during the Elizabethan and Jacobean periods English merchants not only carried out extensive exchange transactions, but also advanced a great deal of money to the State. It is only necessary to examine the first of the Pell Office [2] Order Books, dated 1597–9,[3] to find that large sums were paid by Army paymasters on active service to English merchants "for so much money by them made over by exchange";[4] and there are entries of many such transactions in the remaining Elizabethan and Jacobean books of this well-preserved series of Exchequer records. The Order Book dated

[1] S.P. Dom., Eliz., 264, 145. A Jacobean Chancery bill of complaint, P.R.O., Ch. P., Series II., Bdle 337/70, *Beecher* v. *Quarles*, states that Beecher was "employed in the years 1595 and 1596 to make over money by exchange" for payment of the English forces in Flanders and France. Details of the transactions of Beecher are contained in S.P. Dom., Eliz., 261, 36; 262, 14; 263, 9 and 10; 264, 145; and of other such Elizabethan merchants in *ibid.*, 244, 33; 251, 80; 262, 97; 262, 109; 262, 135; 263, 8.

[2] The Pell Office was that department of the Exchequer of Receipt which recorded all issues, and was presided over by an official called the Clerk of the Pells. After the restoration of this Office in 1597 separate books for this purpose known as Order Books were commenced. The Clerk of the Pells also recorded all payments in the Issue Books. See *Reps. D.K.P.R.*, VI., App. II. pp. 218–25, and III., App. II. pp. 173–87; also Giuseppi, *A Guide to the Manuscripts in the Public Record Office* (1923), I. p. 185.

[3] P.R.O., Recs. Ex. R., Order Books (Pells'), E 403/2721.

[4] The method appears to have been as follows:—Under the authority of the Privy Seal a payment order representing a certain sum, signed by the Lord Treasurer, was issued by the Exchequer of Receipt to the Army Paymaster, who gave it, or sent it, to the merchant who "made the money over by exchange," and the latter presented it for payment at the Exchequer of Receipt.

The following is a synopsis of an entry in the Order Book (Pells'), dated 1609–10, P.R.O., E 403/2729, fol. 14 *b*, relating to the above method: Order dated 22nd March, 1609 (10), under Privy Seal for £5,895 6*s*. 10*d*. to Richard Weight, H.M. Paymaster in the Low Countries, "in prest to be by him paid to Edward and John Meredith of London, Merchants, for so much money by them made over by exchange and paid to the hands of his deputie for the paie and imprests."

The English merchants "made the money over" in three ways: (1) by the actual transfer of metallic money; (2) by selling English goods, usually wool, in Flanders, and thus obtaining ready money locally; (3) by means of bills of exchange drawn on Flemish merchants. See E. Power, "The English Wool Trade in the Reign of Edward IV," *The Cambridge Historical Journal*, II. No. 1 (1926).

1610–11 [1] may be taken as a typical Jacobean specimen. It contains several entries which are remarkable illustrations of the financial activities of London merchants in the reign of James I. One, for example, refers to the repayment on 24th December, 1610, of a State loan of £30,000, with £3,000 interest,[2] a loan which had been advanced by six English merchants; another relates to a State loan of £10,000 advanced by one English merchant; [3] and there are a number of entries relating to the big exchange transactions of Edward and John Meredith "of London, merchants." [4]

We also know from Wilson that exchange transactions were of an important nature in the Elizabethan period. He points out that in dealings of this kind the "bankers and exchangers" made a deduction known as *collibos* in return for their services, or as a recompense for the damage or loss received "by the money which they deliver by exchange." [5] He divides what he terms "the bankers art" into "exchange reall" and "exchange by bills," the former indicating the exchange of metallic money, and the latter including the artifice known as "dry exchange," [6] which has been described as "nothing more mysterious than what to-day would be called a finance bill." [7]

[1] P.R.O., Recs. Ex. R., E 403/2730. [2] *Ibid.*, fol. 96 *b*. [3] *Ibid.*, fol. 66 *b*.
[4] *Ibid.*, fols. 14 *b*; 125 *b*; 150 *b*; 159 *b*; 211 *b*.

The Company of Merchant Adventurers were also active in the business of exchange during Elizabethan times, *e.g.* S.P. Dom., Eliz., 262, 96; and 249, 54.

It is true that in the later Elizabethan and the Jacobean periods a few of these "exchanging" merchants were either "merchants strangers" or merchants of foreign extraction resident in England. Such, for example, were Horatio Palavicino, in Elizabethan times, and Philip Burlamachi, in the reign of James I and Charles I. The latter, however, always appears to have regarded himself as an Englishman.

For examples of Palavicino's transactions see S.P. Dom., Eliz., 241, 38; 256, 26. See also W. H. and H. C. Overall, *Analytical Index to the Remembrancia* (1878), I. 513; I. 615; II. 219; III. 6; VI. 67 (pp. 185–94).

For some of Burlamachi's accounts see B.M., Addit. MS., 18,674, fols. 19–23. See also H. V. Judges, "Philip Burlamachi, a Financier of the Thirty Years' War," *Economica*, November 1926; and *H.M.C.R.*, *MSS. of the Marquis of Salisbury*, Pt. I. p. 163, No. 10; and Pt. II. p. 153.

[5] *Discourse uppon Usurye*, fol. 110 *b*.

[6] *Ibid.*, fol. 114 *b*.

Wilson explains "dry exchange" by stating that it was "practised when one doth borrow money by exchange for a strange region at longer or shorter distances of time to serve his turn the rather thereby not minding to make any reall paiment abroad but compoundeth with the exchange to have it returned back again as the exchange shall pass from thence to London for such distance of time as they were agreed upon."

See R. H. Tawney, *Wilson's Discourse uppon Usurye*, intro. pp. 73–4; M. Postlethwayt, *Universal Dictionary of Trade and Commerce* (*4th ed.*, 1744); and W. Forbes, *A Methodical Treatise concerning Bills of Exchange* (1703), p. 2, for further details about "dry exchange."

[7] Tawney, *op. cit.*, intro. p. 73.

But though in Elizabethan and Jacobean times the "business of exchange" was to a large extent in the hands of certain wealthy English merchants, the English brokers and scriveners had also developed into important financial intermediaries, and in some instances into actual money-lenders. "John Davenant, broker, of London, for certeyne money men and merchants," we are told in a Jacobean Chancery document [1] which refers to the Elizabethan period, "made divers offers in loans or otherwise by way of mart to deliver money to Robert Gyttens," one of Elizabeth's chaplains, who, "by subtle intimacions and sinister practices," was "drawn to enter into divers bonds and statutes unto the said John Davenant," "in great trade" as a broker.

Many English brokers by the end of the sixteenth century seem to have specialised in the "business of exchange." Many, on the other hand, were simply common pawnbrokers, and these, undoubtedly the most vicious of Tudor and Stuart money-lenders, are referred to by contemporary critics as the "retayling" brokers, thus distinguishing them from the "exchanging" brokers, who were termed "sworn" brokers if they traded under official authority.

Malynes, in his *Lex Mercatoria*,[2] has a high opinion of the "sworn" brokers, and regards "the testimony of a sworn broker and his booke together" as "sufficient" to end any differences with reference to mercantile contracts.[3] There were a great many complaints about the dealings of the other class, the "retaylinge broggers," "fripperers," or "thievinge brokers," particularly in the reigns of Elizabeth and James I. Huniman, writing in the latter reign,[4] refers to the large number of "pawnes" taken by such brokers upon "unlawful, intolerable and unjustifiable consideration." They were large receivers of stolen goods, and by carrying on this trade, in spite of laws and proclamations, became a great danger to the public weal. "This dunghill trade of brokerie," wrote Stubbes in Elizabethan times, "newly sprung up and coined in the devil's minting house the shoppe of all mischiefe hath made many a theefe more than ever would have bin." [5]

[1] P.R.O., Ch. P., James I, Bdle G, 16/75, which gives a lengthy and vivid description of the methods of an Elizabethan money-lending broker.

[2] First ed., 1622.

[3] *Lex Mercatoria*, p. 201.

[4] B.M., Royal MS., 18 B. XVIII: "A Project for raysing of a Stocke out of the iniquity, the dangerous proceedings and the unlawful dealings of theivinge brokers to supply the most urgent occasion that the commons daillie have for loan of moneye upon their pawns."

[5] *The Anatomie of Abuses* (1583), Pt. II., no pagination.

The "intolerable consideration" of the retailing brokers is also emphasised by Malynes, who states that these brokers were often financial middlemen borrowing from the monied men in order to lend to the needy at extortionate rates. He quotes their "most favourable extortion by Usurie upon pawnes" as "sixpence for 20 shillings for one moneth of 28 days which is about thirtie in the hundreth by the yeare."[1] He suggests certain remedies for such exactions, one of which, copied from Italy, is the erection of *Monts de Piété*, or "Banks of Charity," for receiving legacies from which advances could be made upon the security of pawns at low rates of interest.[2] He refers to the Venetian exchange office,[3] of which only brokers were members, and thinks that its adoption in England would remedy many abuses; while he strongly advocates the establishment of "Counting-Houses" with "masters" and assistants for dealing "in five severall matters, by Exchange, Banke, Mount of Charitie, *Mensa argentaria*, and Houses of Vendition."[4]

Huniman is more emphatic. He would "bridle" the "retayling broggers" and their "devilish proceedings," by placing them under arrest until their accounts were compared with the bills of their customers. He urges a strict search of brokers' houses throughout the whole of London and the contiguous areas, a search which he thinks would reveal the names of the "money-masters" from whom the brokers obtained the money for their money-lending transactions at rates which, he tells us, varied from 20 to 25 per cent., while they charged their customers 60, 80 and even 100 per cent.[5] For eradicating such exactions he, like Malynes, suggests the erection of *Monts de Piété*, "King James his Bancke Houses of Piete," which he regards as of more importance than the Charterhouse, founded in James I's reign, and all the other London hospitals.[6]

Gerbier, writing in 1641,[7] and Cooke, in 1648,[8] refer to the "horrible usury," and the "cruelties" of the pawn-taking brokers. Both these writers follow Huniman and Malynes as advocates of

[1] *Lex Mercatoria*, p. 337. [2] *Ibid.*, p. 341. [3] *Ibid.*, p. 202.

[4] *Ibid.*, p. 204. Even so early as 1601 Malynes in his *Treatise of the Canker of Englands Commonwealth*, pp. 20–26, described the banking of his time as practised on the Continent, a description which is reproduced in *Lex Mercatoria*, Pt. I. Chap. XX, and entitled "Of Banks and Bankers." He defines a "banke" in the former work, p. 20, as "a collection of all the readie monies of some Province, Citie, or commonwealth, into the handes of some persons licenced and established thereunto by publike authoritie of some Prince, erected with great solemnitie in the view of all the people and inhabitants."

[5] Huniman, *op. cit.*, fol. 11. [6] *Ibid.*, fol. 12.

[7] S.P. Dom., Charles I, 478, 96, fol. 3. [8] *Unum Necessarium*, p. 29.

Monts de Piété, while Gerbier draws attention to the striking increase of usurious practices among the servants of brokers, and emphasises the fact that "such as doe take pawns" were "multiplying daily."

The unofficial brokers greatly increased in number during the 'sixties and the 'seventies of the seventeenth century. A proclamation of Sir Richard Ford, Lord Mayor of London, dated 7th November, 1671,[1] states that "of late years" the "franchises and liberties" of the City had been "much invaded and violated by Foreigners, Stranger Aliens, and others taking upon them the employment of brokers upon the Royal Exchange." His Lordship, therefore, forbade any but "sworn" brokers "to deal or intermeddle" between merchant and merchant. "Exchange," wrote Scarlett eleven years later, "is concluded by Mackelers or Brogers alone betwixt themselves, or by bringing the Parties face to face." "Brogers," he adds, "are Persons Sworn and Authorized by the Magistrate, whose work and Trade it is, to enquire of Persons that have Moneys to remit or to draw, and to agree such Persons concerning the Conditions, acting impartially between them both." [2]

In the last decade of the seventeenth century some of the brokers appear to have developed into bullion dealers,[3] and some into stock-jobbers. Both Houghton and Defoe, writing in this decade, refer to the emergence of stock-jobbing. Houghton in five numbers of his curious newspaper [4] gives "an account of the main things that relate to Stocks and Stock-Jobbing." "The forming of public Joint-Stocks," writes Defoe,[5] "which together with the East India, Africa, and Hudson's Bay Companies before established begot a New Trade which we call by a New name, Stock-Jobbing."

Evidence of the emergence of the stock-jobber, and also of a further increase in the number, and the transactions, of the brokers before the end of the seventeenth century, will be found in a statute of 1697, entitled "An Act to restrain the Number and ill Practice of Brokers and Stock-Jobbers." [6] In the early part

[1] B.M., 21. h. 5 (48). For an interesting account of the activities of the brokers in the 'seventies of the seventeenth century see J. Vernon, *The Compleat Compting House* (1678), pp. 108–11.

[2] *The Stile of Exchanges* (1682), pp. 7–8. Chap. II. pp. 7–13 of this detailed treatise is entitled "Of the duty of Mackelers or Exchange-Brogers."

[3] See 6 and 7 Wm. III, c. 17, s. 7 (1695).

[4] *A Collection for Improvement of Husbandry and Trade*, Nos. 98 to 102, dated 15th June to 13th July, 1694.

[5] *Essay on Projects* (1697), p. 29.

[6] 8 and 9 Wm. III, c. 32. Compare this with 7 Geo. II, c. 8 (1734).

of the following century the nature of the broker's business is clearly defined in an Act of 1711.[1] A section of this Act forbids a broker to receive more than 2*s.* 9*d.* per cent. in any contract or bargain in connection with the selling or buying of "tallies, orders, Exchequer bills, Exchequer tickets, Bank bills, or any share or interest in any joint stock." This is striking proof not only of the nature of the brokers' activities at this time but also of the development of English credit technique.

The other outstanding figure in the London money market of Tudor and Jacobean times was the scrivener, whose original business was the writing of bonds,[2] bills obligatory,[3] and contracts. In this position of clerical intermediary between trader and trader, buyer and seller, and lender and borrower, the scrivener had every opportunity of acquiring an intimate knowledge of financial and mercantile transactions, and of developing into a monied man and a money-lender.

Indeed there are strong grounds for concluding that the scrivener was the most important of these early financial intermediaries. If it is postulated that modern banking began in England with the practice of keeping deposits and the loaning of such deposits to regular customers, then the available evidence points to the scrivener as the earliest English pioneer of the banker's trade. A "procurer of money for men," the scrivener seems to have preceded the goldsmith as a recognised keeper of deposits, and he continued to act as such even after the goldsmith had developed into a banker.

There does not appear to be any evidence to show that the goldsmith, the broker, or the merchant made a practice of receiving deposits in Tudor and Jacobean times. A few instances of merchants keeping deposits occur in the Elizabethan and early Stuart Chancery Proceedings, though not apparently as a regular and specialised business, with a view to reissuing the money deposited in the form of loans, but rather for the purpose of personally using such money in trading transactions,[4] or because

[1] 10 Anne, c. 19, s. 121. These later Acts should be compared with 1 Jas. I, c. 21 (1604), which attempted to curb the activities of the brokers, and 21, Jas. I, c. 17 (1623), the earliest attempt to fix the broker's fees. See also 12 Anne, Stat. 2, c. 16, s. 2 (1713); and 6 Anne, c. 16, s. 4 (1707).

[2] Bonds (*i.e.* sealed notes in which a borrower usually bound himself for twice the amount of the loan) appear to have been frequently transferred by indorsement in Stuart times. See *Buller* v. *Cripps* (1704), I., Salk., p. 130.

[3] Copies of the Tudor bills obligatory are given in W. West, *Symbolæographia* (1590), sect. 38; and I. B., *The Merchants Avizo* (1607), p. 55. The latter treatise also gives a copy of a Tudor bond.

[4] *E.g.* P.R.O., Ch. P., Early, Bdle 608/24, *Brown* v. *Thomas and Agnes Doughty.*

the deposits were safer in the merchants' houses than in the houses of the depositors.[1] Evidence, however, of the scrivener functioning as a deposit keeper early in the seventeenth century is revealed in an Act of 1621,[2] which refers to this intermediary as a person who received "other men's money or estates into his trust or custodie." There is also in existence a well-preserved Chancery Bill of Complaint, dated 1616,[3] which describes in detail the "shoppe" and methods of a metropolitan scrivener. This interesting document states that one John Hedges, of Mitcham, Surrey, had on many occasions as "he had spare in money . . . delivered the same unto one William Gregory cittizen and scryvener of London," and that on or about Michaelmas 1615 had "delivered unto" Gregory £200, such "divers sums" "remaining in the scrivener's hands" and "at his disposition." We are also told that these deposits were made use of by the scrivener as loans to his customers, and that he kept a "servant or apprentize" who was his "principal dealer," and "by him imployed for receavinge and payinge of divers somes of money." [4]

Throughout the seventeenth century the scrivener, or "money scrivener" as he is sometimes termed by contemporary writers, was not only a particularly active money-lender but also a recognised custodian of deposits. In the "Act for the restraining of excessive Usury" [5] of 1660 he occupies pride of place among the usurers of the day, and even so late as the reign of Anne he again appears first in a list of financial middlemen in an Act of

[1] There are, however, instances in the latter part of the seventeenth century of merchants forming partnerships and accepting deposits as a specialised business. The deposits were invested in various trading enterprises, and the depositors received joint bonds as securities. See *The Case of Richard Thomson and Company* (1678).

[2] 21 Jas. I, c. 19, s. 2. See also *Herbert* v. *Lowns*, *Eng. Reps. Ch.*, XXI., Chap. I. pp. 495–6.

[3] P.R.O., Ch. P., James I, Bdle H 13/4, *Hedges* v. *Gregory and Atwood.*

[4] Further details of the money-lending activities of the scrivener in Elizabethan and Jacobean times are contained in Ch. P., Early, Bdle 407/44, *Fulwoode* v. *Mayor and Sheriffs of London;* and *ibid.*, James I, Bdle H 2/29, *Hodges* v. *Chubb.*

Descriptions of the activities of the scrivener are also given by Wilson and Stubbes. The former, *Discourse*, p. 108, refers to the scrivener's house as a kind of money-lending agency, while Stubbes, *Anatomie of Abuses*, pp. 78 *b*–79, deals with this intermediary as a deposit keeper, a person to whom money "is committed" upon "good securities to the owners for the repayment thereof" and a "certaine allowance for the loane thereof," such deposits being afterwards loaned with interest to "poore petitioners."

B.M., Lansd. MS., 113, 9, points out that not only did the merchants entrust the scriveners, and also the brokers, with large sums for insurance purposes, but that they also were accustomed to receive a great deal of credit from these intermediaries.

[5] 12 Chas. II, c. 13.

1713.[1] Carefully compiled treatises intended for his guidance appeared in Stuart times,[2] and his business methods and artifices are frequently discussed in the writings of contemporaries. "The Country Gentleman," states Powell in his curious little book, *The Art of Thriving*,[3] published in 1636, "he is by this time come up to London and has brought his Atturney with him, one that professes the taking up of money by right of writ. His Atturney brings him to the Ship behind the Exchange and leaves him there while hee goes to fetch the only *Noverint* in those parts, whom hee prepares at his shop with the purpose. . . . Hee then brings the Scrivener into the taverne . . . and the Scrivener according to the true practice of most of them at the first meeting, especially while they were with the borrower in the taverne, was more easie in promising than they in proposing. . . . Let me see, saies the Scrivener, there comes in this night Sir Samvan Skynkers money, five hundred, and to-morrow much more. I can supply you one hundred to a thousand out of that as your occasions require: how say you?"

The facile pen of Dekker, one of Powell's remarkable contemporaries, gives us a similar picture. "The Gul-groper," he states, referring to the scrivener or "money-monger," in his *English Villanies*,[4] "takes him (the young gentleman) to a side window, and tells him he is sorry for his hard lucke . . . yet for his fathers sake (whom he hath known so long) if it pleases him he shall not leave off play for a hundred pounds or two. If my young Ostrich gape to swallow downe this metall . . . then is the gold poured on the board, a Bond is made for a repayment at the next quarter day."[5]

And so, also, that shrewd commercial writer, Sir Dudley North, refers, in a description of the banking methods of his time, to the scrivener's financial activities. "The Merchants and Gentlemen," he remarks, "keep their Money for the most part with Goldsmiths and Scriveners, and they, instead of having Ten Thousand Pounds

[1] 12 Anne Stat. 2, c. 16, s. 2.

[2] *E.g.* T. B., *The Several Forms of Instruments relating to the Affairs of Merchants and Traders* (1674); G. Billinghurst, *Arcana Clericala* (1674).

[3] P. 138.

[4] Section marked C. 2. Dekker's *English Villanies* was published in 1631.

[5] Vernon in his *Compleat Compting House*, which appeared in 1678, thus describes the scrivener's methods (p. 128): "Suppose a man wants £100, he goes to a Scrivener and tells him his wants; the Scrivener tells him he hath a Friend hath £100 lies by him, and if he will give him anything for his pains and trouble, he will endeavour to possess his Friend . . . that he will procure the said £100 to be lent him for six months, or twelve months, or as they do agree; this is called Procuration, and many times 40*s*., 50*s*., £5, is given to a Procurer to obtain the lending of £100 for twelve months."

in cash by them as their Accounts shew they should have of other Mens Money, to be paid at sight, have seldom One Thousand in Specie; but depend upon a course of Trade whereby Money comes in as fast as it is taken out: Wherefore I conclude that the Specific Money of this Nation is far less than the common Opinion makes." [1]

In addition, however, to the scrivener, the "retayling" and "exchanging" brokers, and the "exchanging" merchant, two other types of middlemen, became more conspicuous with the expansion of English trade in the late Tudor and early Stuart periods. These were the wool "brogger" and the corn "bodger" of provincial England.[2] The former, who was "in effect the banker of the cottage weaver," [3] may be regarded as the precursor of the old-fashioned country banker. Invaluable as an agent of the exporting merchant or the wool-jobbing capitalist,[4] the wool "brogger" was a particularly helpful intermediary to the wool-grower and small clothier of the countryside. To the wool-grower he advanced money on the security of future supplies of wool, and to the clothier he sold wool on credit. Loans and credit sales of this nature were quite common in Tudor times,[5] and even much earlier.[6]

But the expansion of English trade was not the only factor which gave an impetus to the activities of financial intermediaries. Another important reason why these activities increased in the

[1] *Discourse upon Trade* (1691), p. 20. See also J. Cary, *An Essay on the Coyn and Credit of England* (1696), p. 25; and A. Justice, *A General Treatise of Monies and Exchanges* (1707), pp. 20–21.

[2] For details of the activities of wool "broggers" and corn "bodgers" see R. B. Westfield, *Middlemen in English Business* (1915), pp. 265–6 and 134–6; N. S. B. Gras, *The Evolution of the English Corn Market* (1915), particularly Chap. VII; W. Cunningham, *Growth of English Industry and Commerce* (5th ed., 1921), *Modern Times*, I. pp. 85–100; and Bland, Brown and Tawney, *English Economic History, Select Documents* (1914), pp. 367–9, 373–80, 385.

The business of the wool "brogger" is dealt with in several Tudor statutes. See, for example, 4 Hy. VII, c. 11 (1487); 37 Hy. VIII, c. 15 (1545); 1 Ed. VI c. 6 (1547).

[3] Tawney, *Wilson's Discourse, etc.*, intro., p. 49.

[4] See G. Unwin, *Industrial Organisation in the Sixteenth and Seventeenth Centuries* (1904), App. A II.

[5] The operations of financial middlemen in industry are also very evident during the Tudor epoch in the organisation of the tin mining of the Stannaries. See G. R. Lewis, *The Stannaries* (1908).

[6] There is evidence which shows that the advancing of money to English wool-growers on the security of future supplies of wool was commonly practised in the thirteenth and fourteenth centuries, particularly by Flemish and Italian merchants, and that the granting of credit in connection with the sale of wool and cloth was an ordinary feature of English trade. See E. Postan, "Credit in Mediæval Trade," *Economic History Review*, I., No. 2 (1928).

late Tudor and early Stuart periods was the change of public opinion with reference to the ethics of usury.[1] In the antecedents of English banking the legalisation of usury is an event of considerable importance. The Act of 1545,[2] which allowed the taking of interest up to 10 per cent., increased the transactions of "money master" and money-lender.[3] They, however, received a set-back in 1552 when the Act of 1545 was repealed,[4] but were again stimulated by the Elizabethan Act of 1571,[5] which revived the maximum rate of 10 per cent.[6]

With this increase in the activities of financial intermediaries the earliest English joint-stock companies made their appearance,[7] and so also did the financial terms, stock, share, dividend, and capital. The terms stock and share occur in connection with the Tudor mining enterprises.[8] An early instance of the term

[1] For further details about this change see Sir William Ashley, *An Introduction to English Economic History and Theory* (3rd ed., 1894), Pt. II. Chap. VI; Cunningham, *op. cit., Modern Times*, I. pp. 153–9; Tawney, "Religious Thought on Social and Economic Questions in the Sixteenth and Seventeenth Centuries," *Journal of Political Economy*, 31, Nos. 4, 5 and 6 (1923); and Tawney, *Religion and the Rise of Capitalism* (1926), particularly pp. 36–55.

[2] 37 Hy. VIII, c. 9.

[3] It is also possible that the activities of financial intermediaries were increased as a result of Henry VIII's dissolution of the monasteries and Edward VI's confiscation of the gild lands. Though the documentary evidence is not conclusive, it is very probable that the small farmers, for example, who were accustomed to receive from the monasteries and the gilds loans of seed, cattle or sheep, and who often obtained money from the monastic authorities on the security of future supplies of wool, would, after such sources of assistance had disappeared, be compelled to make increasing use of the services of financial intermediaries. See R. H. Tawney, *The Agrarian Problem in the Sixteenth Century* (1912), pp. 109–10.

[4] By 5 and 6 Ed. VI, c. 20. [5] 13 Eliz. c. 8.

[6] The various laws dealing with usury in the sixteenth and seventeenth centuries are: 3 Hy. VII, c. 5 (1486); 3 Hy. VII, c. 6 (1486); 11 Hy. VII, c. 8 (1494); 37 Hy. VIII, c. 9 (1545); 5 and 6 Ed. VI, c. 20 (1552); 13 Eliz. c. 8 (1571); 21 Jas. I, c. 17 (1623); 12 Chas. II, c. 13 (1660), which was confirmed by 13 Chas. II, Stat. 1, c. 14 (1661).

In the seventeenth century the Act of 1623 limited interest to 8 per cent., and the Act of 1660 reduced the limit to 6 per cent., which was further reduced to 5 per cent. by 12 Anne, Stat. 2, c. 16 (1713). All the Usury Laws were repealed in 1854 by 17 and 18 Vict., c. 90.

For a list of the most important contemporary treatises relating to the subject of usury see Cunningham, *op. cit., Modern Times*, I. p. 154, footnote 3.

[7] The first two joint-stock organisations were the Russian or Muscovy Company and the Guinea Adventurers, both formed in 1553. For full details of the origin and development of such organisations up to 1720 see W. R. Scott, *The Constitution and Finance of English, Irish and Scottish Joint Stock Companies* (1910–12).

See also Cunningham, *op. cit., Modern Times*, pp. 214–84; and W. A. S. Hewins, *English Trade and Finance chiefly in the Seventeenth Century* (1890), Chap. III; H. Pirenne, "The Stages in the Social History of Capital," *American Historical Review*, Vol. 19 (1914).

[8] *E.g.* S.P. Dom., Eliz., 36, 95.

dividend appears in the documents relating to the privateering expeditions of Frobisher, documents in which the term share frequently appears.[1] The earliest English examples of the economic term capital are to be found in certain curious Tudor treatises relating to accountancy.

These early English accountancy books are also evidence of the development of credit organisation in England during the late Tudor period, and, indirectly, of the non-existence during this time of an English bank of the type then functioning in Venice. The earliest specimen that has survived is a valuable book written by James Peele, "citizen and salter" of London, and published in 1553.[2] In another book-keeping manual written by Peele, entitled *The Pathe Waye to Perfectnes in th'accomptes of Debitour and Creditour*, which was published in 1569,[3] occurs what appears to be the first instance of the term capital in a treatise written by an Englishman.[4] "Then," writes Peele in this treatise in describing what he terms "an inventorie of traffique," "substracte the some totall of the creditours from the totall some of money, debts, and goodes, and the remayne is the net substaunce, stocke, or capitall by thowner put in traffique of merchandise."

A third of the Tudor accountancy books, the *Brief Instruction and maner how to keep bookes of Accompts after the order of Debitor and Creditor*, issued by John Mellis in 1588, also uses the term "capitall" as equivalent to that which remains—the "remaine," "net-rest," or "substance"—after a person has "substracted" the "totall summe" of his "creditours" from the "whole summe" of his "ready money, debtes, and goods." But this book is chiefly interesting because it is a translation of the accountancy section of a Venetian treatise, Lucas Pacioli's *Sũma de Arithmetica, Geometria Proportioni et Proportionalita*, which was published in 1494.[5] Pacioli's lengthy section on accountancy[6]

[1] Scott, *op. cit.*, II. p. 79.

[2] *The maner and fourme how to keep a perfect reconyng after the order of the most worthie and notable accompt of Debitour and Creditour.*

[3] Both A. Anderson, *A Historical and Chronological Deduction of the Origin of Commerce* (1787–9), I. p. 130, and D. Macpherson, *Annals of Commerce* (1805), II. p. 149, state that "the new book-keeping was introduced into England in 1569," referring to Peele's second work.

[4] See E. Cannan, "The Early History of the Term Capital," *Quarterly Journal of Economics*, 35 (1920–21), pp. 461–81; and R. D. Richards, "The Early History of the term Capital," *ibid.*, 40 (1925–6), pp. 329–38.

[5] Mellis's book is also interesting because it is a revised edition of an earlier translation of Pacioli by Hugh Oldcastle, which was published in 1543, but, unfortunately, no copy of Oldcastle's book has survived.

[6] This is Section IX, Treatise XI, of the *Sũma de Arithmetica, Geometria Proportioni et Proportionalita*, and is entitled "Particularis de computis et scripturis."

deals in some detail with the Venetian banking methods of the day, but in the translation issued by Mellis the chapters relating to banking have been omitted. Even so late as the reign of Charles I, Richard Dafforne stated in a voluminous accountancy treatise entitled *The Merchants Mirrour*, which appeared in 1636, that the "Banck-Account" was "needless here in England." [1]

Such is a brief description, with particular reference to Tudor and early Stuart times, of the transactions of the English pioneers of credit technique. The recognition, after the eclipse of Antwerp and its famous Bourse, of the London money market as a factor in international finance and the consolidation of this market in the Royal Exchange [2] are events of outstanding importance in a century of great economic changes.[3] The commercial expansion of the Tudor and early Stuart periods stimulated the activities of financial middlemen, and increased the use of paper credit. The change of view-point with reference to the taking of interest resulted in a release of more capital seeking investment, and in the beginning of joint-stock enterprise. The passing before the end of Elizabeth's reign of the first English statute relating to insurance [4] lessened the risks of traders, and thus made them more ready to invest in mercantile "adventures." The genesis of modern capitalism made the monetary specialist indispensable, and there emerged as pioneers of a new financial régime the merchant, the broker, the scrivener, and the goldsmith, pioneers of a credit technique which developed so rapidly under the ægis of the goldsmith in the age of the later Stuarts.

R. D. RICHARDS

[1] Dafforne deals with "bancks" because, as they functioned on the Continent, he thinks that English merchants should possess some information about them. "Banck," he writes, *op. cit.*, p. 10, "is a name used at Amsterdam where all Bills of Exchange of 60*l* sterl. and upwards, ought to be paid and received."

[2] Ready for occupation in 1568, opened by Elizabeth on 23rd January, 1571, and followed in 1608 by the New Exchange, which James I called "Britain's Burse," and later in the same century by the Middle Exchange and Exeter Exchange. See J. Stow, *Survey of London* (1598), pp. 150–51; E. Howes, *The Annales or Chronicles of England* (1615), pp. 868–9; E. Leigh, *England Described* (1659), p. 133; T. de Laune, *Angliæ Metropolis* (1690), pp. 148–50; and C. Knight, *London* (1875–8), II. Chap. XLIII.

[3] See W. Cunningham, "Economic Change," *Cambridge Modern History* (1902–11), I. Chap. XV; J. E. Symes, "The Economic Revival," *Social England* (undated), ed. H. D. Traill and J. S. Mann; Tawney, *Religion and the Rise of Capitalism*, pp. 66–79.

[4] 43 Eliz. c. 12, An Act concerning matters of Assurances used among Merchants.

A PLEA FOR THEORY IN ECONOMIC HISTORY [1]

Controversies regarding method are almost always barren. But it may none the less be useful to recall for one moment the fierce antagonisms which were roused in the last quarter of last century, especially in Germany, over the comparative virtues of historical and theoretical treatments of economic phenomena. It will be remembered that the school headed by Gustav Schmoller in Berlin, partly on principle but even more in practice, wanted to throw overboard the theoretical study of economics which had dominated the field for at least a century before, wanting to substitute for it a collection of facts from different ages, studied without any preconceived ideas as to what was to be learnt from them.

From these painstaking and extensive efforts surprisingly little has emerged in the shape of contributions to our insight into the working of economic life. To prove this, it may be enough in this place to point to the complex problems of war and after-war economy. These might have been expected to afford a particularly wide scope for a treatment on the lines of the so-called historical school, mixed up as they were with all sorts of political and social issues. But as a matter of fact practically all scholarly contributions to them have been the work of theoretically trained economists, making extensive use of their training in its application to the matter in hand. The natural consequence of this has been that theory has become dominant again in the study of economics, not only in America, Britain, Scandinavia, Holland and other countries, where it had never been given up, but in Germany also.

Now, it would be easy to draw the conclusion that this simply points to a cleavage, a natural and necessary distinction, between economics proper and Economic History; and this view appears to be widely held. To all appearances there is also a great deal to be said for it, in so far as Economic History means the study of the causes of economic developments, the study of the reasons for changes in the body politic, on the economic side as on all others. Even there a very great deal is to be learnt from economic theory, as the following will indirectly show; but that

[1] Read before the International Historical Congress at Oslo in August 1928, with a few alterations.

the study of economic development is something distinct from the study of an actual economic situation is none the less true, and it must be added that the treatment of social evolution as subject to historical laws has so far proved of small value. In this respect the non-theoretical treatment of history has lost no ground; and this must by no means be lost sight of.

But it is quite otherwise with regard to the explanation of economic phenomena "in being," *i.e.*, as considered in existence at a particular time. To argue for separating the method of such a study when it applies to earlier ages from that which is used for the problems of to-day is certainly not admissible without actual proof. It would mean, either that the economic conditions of earlier times were fundamentally different from those of the present day, or that economic theory had been created with an exclusive regard to the more or less ephemeral characteristics of the present age. On the former supposition, it might be asked to what use the study of Economic History could possibly be put; in the latter case it would point to a narrowness in the concepts of economic theory which would be far from satisfactory. If, on the other hand, both suppositions are wrong, it is difficult to escape the conclusion that economic theory can be of value to the understanding of economic phenomena at all stages of human development; and as a matter of fact they *are* both wrong, as the following will show. It is therefore necessary to repudiate the idea of economic theory and Economic History as belonging to different stages of human development; they are both essential to an understanding of all periods of history, including the present one.

This relation of theory to the study of history is not peculiar to the field of economics. On the contrary, it is necessary to historical study to base itself all along the line upon what has been found with regard to the general character of those phenomena which are studied. To take a parallel as remote from economics as possible, the study of the history of war has always been found to stand in need of a knowledge of tactics and strategy. The battles and campaigns of Alexander, Hannibal, Cæsar, Charles XII and Napoleon, as well as the history of naval war at different periods, have been studied on the same lines as those of our own day. And this essential unity in the treatment of warfare has been found to exist in spite of the fact that war has from some points of view been revolutionised through the use of powder and of steam.

As to economics, this necessary unity in the problem, irrespec-

tive of time and space, is considerably greater than is the case with war. It is here, if anywhere, a question of *nécessités permanentes ;* for the basis of economic life and consequently of economic theory is practically universal and all-embracing; it is the necessity for " making both ends meet." Economy is not a particular branch or department of human life, as is often believed; it is an aspect of almost all human activities, or those activities as regarded from a particular point of view. The name " economy " and that of the science relating to it, economics, aptly describes the point of view; for *οἰκονομία*, housekeeping, presupposes an insufficiency of resources; without such an insufficiency there would be no need for housekeeping. The insufficiency of human resources for satisfying the total wants or requirements felt and put forward by man, the " scarcity " of commodities and services, is at the root of almost everything which we call economics. The fundamental concept of economic theory, in accordance with this, is the relation between wants and the means for their satisfaction, between demand and supply. From this flows the necessity of limiting the demand to the available amount of goods and services, as well as the efforts made to direct those goods and services into the channels which are considered best able to satisfy such wants as make themselves felt. The results falling to different groups and individuals constitute their incomes. In so far as the results are achieved through barter or exchange, a new, particularly important set of problems emerges, and primarily the questions of money. The views entertained upon the interplay of all these complicated factors constitute economic opinion or ideas.

It is now made clear for what reason the economic problem must be *fundamentally* the same in all ages. If goods and services are insufficient for satisfying everything which man is asking for at the present time, it was only to be expected that such must have been the case in earlier ages, when the supply of them was far smaller, when man had not learnt one-tenth of what he knows now about his ability to direct his efforts to the purposes desired. True, human wants, as actually felt, were also much smaller in past ages, so that there is no absolute necessity for the scarcity or insufficiency to have made itself felt in those days. It is enough to state that as a matter of fact it did, and that there would have existed no economic problem if it had not.

On the other hand, the solution of the basic problem of economic life, the adjustment between demand and supply, may differ enormously and has done so. Even important concepts of an economic theory intended to explain modern conditions will

therefore have to be discarded when remote ages are concerned; *e.g.* the price system, which is now in some quarters looked upon as the central body of economic doctrine, is often meaningless with regard to earlier times, because prices—or at least prices alone—were not used as the engine for equalising demand and supply. But if other means were made use of instead, this does not affect the fact that the adjustment must have taken place; and the character of this process will then have to be studied on the basis of general economic theory. For most periods of known Economic History the changes necessary in the usual theory are not fundamental, however. Especially in the field of money, which constitutes from some points of view the favourite playground of economic theory, and which is at the same time calling for the lion's share of the attention of economic historians over some twenty-five centuries, there are few problems upon which the generally accepted theory is unable to throw some light.

It has been said, *e.g.* by the well-known German scholar Bücher, that the different character of economic life in different ages calls for a particular set of economic concepts for each successive age, one for "household economy," another for "town economy," and a third for "national economy." But it is difficult to see the advantage of such a curious procedure. Economic life, like human life in general, is not "transmuted" from one perfectly consistent set of relations to another, but changes, on the contrary, uninterruptedly in time and space, is never altogether the same in one year as in the next, in one place as in the neighbouring one. The creation of hard-and-fast lines between different periods is therefore in itself distinctly unfortunate and must not be made unless it is indispensable. And this is not at all the case with economic theory. For even if it is intended exclusively for modern conditions, theory must not limit itself to one particular set of circumstances. If the theory starts from abstract and consequently unreal conditions, these premisses must in the subsequent study be modified now in one direction and now in another, in order to make them suit actual facts. There is not the slightest reason for giving up this method when the facts of previous ages come to be studied. There may be a difference in degree, but there certainly is none in character, between what is done with regard to modern and what should be done for earlier economic problems.

Coming now to a more concrete discussion of what economic theory can do for Economic History, this will be found to depend

to a great extent upon the task which historians are setting themselves. Historians not seldom think they have done everything which can be expected from them when, by the aid of auxiliary sciences and historical criticism, they have ascertained their facts and have presented them. If this view, the reasonableness of which does not now concern me, is held, the use of economic theory is necessarily limited; for it cannot be used as a substitute for historical criticism. A good deal can be learnt from it even for such problems, however; for theory is in a great number of cases able to create a strong presumption for or against the existence of alleged facts. It may appear dangerous for an economist, who lives long after the time in question, to claim such a superior knowledge; but the economist knows how difficult economic facts are of observation and what sorts of mistakes are usually made; and as a matter of fact the historian does not fail to do the same thing in other cases. To quote MM. Langlois and Seignobos in their well-known book, *Introduction aux études historiques*: "Historiquement le diable est beaucoup plus solidement prouvé que Pisistrate: nous n'avons pas un seul mot d'un contemporain qui dise avoir vu Pisistrate; des milliers de 'témoins oculaires' déclarent avoir vu le diable. . . . Pourtant nous n'hésitons plus à rejeter le diable et à admettre Pisistrate."

But no doubt the value of economic theory increases enormously when the work of historians is carried further than the stating of external facts; for its most important use refers to the *choice* of facts and the *explanation* of them.

As to the choice of facts, it is a remarkable thing that a very great, perhaps even the greater, part of what is commonly called Economic History is something else, such as social, legal, political or otherwise institutional, or, on the other hand, technological, history. A study of numismatics is something quite different from that of the functions of money in economic life; the history of banking, of iron, of shipbuilding, of agriculture, may be absolutely non-economic, if it is not concerned with the part played by these different activities in their relations to demand, if not studied from the point of view of their inter-relations with the other factors of economic life. For, as I have said already, economics is not concerned with any particular set of external facts, but with a particular point of view upon almost all human activities. Consequently, the history of, say, the Socialist party is no more necessarily economic than that of the Conservative party. The history of class conflict, in which Marx saw the true meaning of all history, is not necessarily a problem of Economic

History, as class antagonism can have many reasons besides economic ones. And the notorious dictum of Feuerbach, *der Mensch ist was er isst*, "man is what he eats," is not an economic but a physiological conception of history.

It is perhaps even more important to point out that the legal or social character of institutions is distinct from their economic character. A very significant instance of the want of clearness on this point is the study of the rise of towns in the early Middle Ages. For it has usually been taken as a criterion of a town that it is a place having a sort of charter, a certain system of law, a certain form of administration. As a matter of fact, a town in the economic sense—or in any economic sense—may have been lacking in all these legal or institutional characteristics; and, on the other hand, hundreds of places have had those characteristics without differing economically in any way worth mentioning from the rest of the country. Scholars having made these distinctions imperfectly clear to themselves have been led to discuss town charters as if they were concerned with the rise of actual towns, though those charters would have proved rather an insufficient livelihood for the inhabitants.

In the same way, the study of the manorial, or *hofrechtliche*, origin of crafts and the legal status of the craftsmen have been discussed as problems of Economic History, though they may have been more or less unimportant to the economic character of mediæval industrial life, and were in any case only indirectly concerned with it. This constant unwillingness to distinguish between economic and legal or institutional history has been a rather serious limitation on the value to Economic History of important contributions made by the well-known German scholar von Below; his studies are with few exceptions institutional and very often not economic, even when he believes them to be. In the same way, Sir Paul Vinogradoff a few years ago complained of a recent Economic History of the Middle Ages because it did not contain more of legal history than it did; the obvious answer is, that it had no business to.

Of course this must not in the least be construed as a disparagement of the non-economic sides of history; it is solely intended to point out that Economic History has a distinctly circumscribed object of its own, which cannot be fulfilled if it is constantly set aside for aims belonging to other departments of historical study.

It is only natural that this danger should exist; for Economic History has an object and materials which are usually more intangible than those of other branches. How coins have been

minted, iron smelted, or corn sown, are concrete problems, not always easily solved, it is true, but still belonging to something external. Laws and institutions have not got the tangible character of technological processes; but they are none the less usually embodied in *ad hoc* produced things, put upon paper and so on. But while economic facts are always internal, human, or psychological, like institutions, it has usually been nobody's business to put them on paper. They constitute the relations between supply, which is partly tangible (commodities) and partly not (services), and demand, which is altogether intangible; these relations come to light through prices, incomes and so on, all of them things which have no generally accepted embodiment and are even extremely difficult of presentment in their totality. It is therefore greatly to be feared that Economic History, of which so much has been expected, will be unable to do the work allotted to it unless a clear view is gained of what it really means, which sort of facts it has to work upon.

So much about the choice of facts. In the explanation of facts the use of economic theory is even more indispensable. A few instances must suffice, selected more or less at random.

A problem common to most periods of known history—which I have treated in Swedish at different times and hope to be able to come back to—is the view entertained with regard to the desirability of "plenty" or "scarcity" of commodities existing in a country, "love" or "fear" of goods. Broadly speaking, the former, the "love" of goods, resulting in a tendency to favour imports and hamper exports, dominated the periods of natural economy, because under those conditions it was clear to the meanest capacity that you could not gain by giving much away and getting little back. But the introduction of money, though of enormous importance as a means of facilitating exchange, at the same time complicated economic relations more perhaps than anything else has done, and thus concealed from view the fact that the real reason for giving goods away was the need for having goods—not money—back. The consequence was that tendency and policy which is usually called mercantilist, though it has survived mercantilism and is still a power in the world.

These very ideas of natural and money economy stand in need of much more economic analysis than they usually receive at the hands of historians. Money is an instrument of exchange, and the first question consequently must be, whether, or rather, to what an extent, exchange is taking place at all; this is the fundamental distinction. If exchange *is* taking place, the second problem will

be, whether it is a direct one, *i.e.* barter of goods and services against goods and services, or an indirect one, introducing a particular sort of goods which neither of the parties to the exchange wants, as an intermediary between those which they do want. In the second case, that of indirect exchange, there are also two very important cases to be distinguished, that of all sorts of common goods used as intermediaries, and that of one particular commodity serving as a generally accepted intermediary. Only in the last-named case have you got money economy; natural economy is a concept covering both barter (direct exchange) and indirect exchange through the aid of promiscuous common goods —non-exchange, lastly, remaining outside both concepts. All these types of economy are historically important, and it would be easy to exemplify them from different stages of human development—that of an indirect exchange without the use of money, for instance, from the history of Sweden in the sixteenth century. But unless theoretically trained, the student of Economic History will be unable to look out for the problem at all.

To take another instance. In the years following the World War attempts were made to elucidate the Economic History of the Later Roman Empire by showing the existence at that period of "scarcity" and "high prices," as a parallel to the problems of the years 1914–18; this was even considered as one of the principal reasons for the decline and fall of ancient civilisation. But the whole of this reasoning lost its force through an inability to distinguish between a rise in general prices, almost always caused by changes in monetary conditions, and a rise in particular prices for important commodities, like food, of which the supply had diminished. Earlier explanations of that same phenomenon, the decline of ancient civilisation, have suffered even more from a want of economic insight; perhaps the most astonishing being that which explains the ruin of the work of centuries through the interesting fact that the Empire became too great to have a foreign trade—as if trade lost its usefulness because both parties to it belonged to the same State! Elementary misunderstandings of a more or less mercantilistic character are among the most common in the study of Economic History.

An often-recurring problem is the consequence of interference with prices and even more with wages. If the result is reached that, say, assessments of wages, as they have been practised for thousands of years, have been depressing or raising the payment of workers as compared with what it was before, it is necessary not to stop at that point but, on the contrary, to try and find out

how such a system could have been reached. As the supply and the demand for labour were—presumably—uninfluenced by wage assessments, it is truly remarkable that the price could have been changed. Taking the best-known of these instances, the measures intended to prevent the workers from profiting from the Great Plague about the middle of the fourteenth century, how were farmers prevented from competing for the supply of labour, which had diminished as a consequence of the Plague? Before this is discussed, no true explanation has been given. Or take the parallel case of "customary" rents. If landowners really were, or felt, bound not to increase rents even when the demand for leases exceeded the supply at these rents, in what way was the choice effected between those wanting to take the same lease and of which only one could get it? To state that legislation or custom has been effective in cases like these is really saying nothing; for the economic problem must still be solved.

Or take another case, that of the influence upon the balance of trade of one measure or another, resulting in an excess of imports or exports. The important thing is of what that external result is a picture: in what way the excess of imports was effected or paid for or payment was received for the excess of exports, either through a flow of precious metals, a change in shipping or other services, or international credits. The change in the balance of trade in itself tells us nothing of economic relationships.

It is quite true that our knowledge of facts is very often too incomplete to admit of a clear answer to what constitutes the real economic meaning of what has happened. But even in that case it is necessary not to stop at a so-called fact which is meaningless in itself; what explanation it really points to must be investigated, and often it will be found out that the sources will yield all the knowledge wanted, if only properly questioned. It is the lack of that questioning which is most usually at the bottom of the difficulty. Without the aid of economic theory, economic historians usually lack what is called the "heuristic principle," *das heuristische Prinzip.*

As I have said already, monetary problems are the most important field of all for a use of economic theory in the service of history; fortunately it can be added that it has also been more extensively applied to these subjects than to most. But still much remains to be desired. This is perhaps even more the fact with regard to the relations between money and capital, a problem which presents great difficulties in most ages. A special warning, I think, is necessary against the promiscuous use of the

concept of "capitalism"—*das Wort das sich immer zur rechten Zeit einstellt, wo volkswirtschaftliche Begriffe fehlen*, to adapt a famous phrase from the *Faust* of Goethe. By this it is, of course, not intended to infer that some rational and distinct meaning cannot be expressed through the word "capitalism," but simply that it is far too often made an excuse for muddled thinking.

If space admitted, it would be very tempting to go more deeply into the use of economic theory in the service of history. But I hope to have made good my thesis that no Economic History worthy of the name is possible without it.

ELI F. HECKSCHER

Stockholm.

METHODS OF INDUSTRIAL ORGANISATION IN THE WEST MIDLANDS, 1860–1927 [1]

The West Midland area has received undeservedly fickle treatment from economic historians. Their attention has been repeatedly directed towards the industrial development of the district during the eighteenth century, to its early iron trade, to its brass and copper trades, and to its great pioneers in the sphere of engineering; but its history during the nineteenth century has been neglected. This is unfortunate, because the changes which have occurred in the economic structure of the area during the last sixty or seventy years have not only been of great intrinsic interest, but they reflect in a clear and unmistakable fashion the forces which have been modifying the industrial character of the whole country. It is with one aspect of these changes that I wish to deal. In considering the rise of the factory system and, indeed, the whole of those changes which we describe by the term "the industrial revolution," there is a well-recognised danger in generalising from a few staple industries. We cannot, in fact, get a true and balanced picture of the movement unless we also take into account the multitude of minor trades, which together have employed a large proportion of the population; and for this purpose no area can be of greater interest than the West Midlands, where a remarkable variety of industries have flourished, and which may be considered representative of all the unspecialised industrial areas of the country. Many of these Midland trades remained independent of the tendency towards large-scale production, which by 1850 had carried the staple industries into the factories, until well into the last quarter of the nineteenth century, and it is with the causes of this conservatism and with the forces which ultimately led to a transformation that I wish specially to deal. There is also another problem which I propose to touch upon. Up to the present there have been few attempts to study the stages of growth in the evolution of the factory, especially from the point of view

[1] Read before Section F of the British Association at Glasgow, September 1928. Much of the information in this paper has been obtained by personal inquiry from those who are, or who have been, concerned with industries in the West Midland area.

of its administration and control, and, since the West Midlands have an important contribution to make to this neglected subject, certain aspects of it will also be considered. I must explain that I have taken the year 1860 as a starting-point, because the decade which followed corresponded roughly to the period when a stage of industrial growth, which had begun about a century previously, reached its culminating point, and when just ahead lay an era of far-reaching change.

In the first place, some idea must be given of the type of manufacture carried on in the 'sixties; and, for this purpose, the area may be divided into two sections, one consisting of Birmingham itself and the immediate neighbourhood, and the other that part of South Staffordshire and Worcestershire which is known as the Black Country. Both divisions of the area were then, as now, renowned for the multiplicity of their trades; but whereas the former was engaged in the manufacture of highly finished articles expressed in many different materials, the Black Country was the home of the heavier and the cruder manufactures and was concerned mainly with iron. In Birmingham itself the four leading manufactures consisted of the gun, jewellery, button and brass trades. The pen, bedstead, screw and wire trades were of substantial, if secondary, importance, and the town shared with the Black Country such industries as the flint glass, saddlery and harness, edge tool, tinplate and japanned ware and rolling stock manufactures. In the Black Country the greatest amount of employment was afforded by the heavy industries, viz. coal and ironstone mining, pig and wrought-iron production, and the manufacture of railway material and constructional engineering work. Scarcely less important than this group was the wrought-nail trade, which, employing some 18,000 persons, was the leading small metal manufacture of the area. In addition, there were the highly localised industries, lockmaking at Willenhall and Wolverhampton, chainmaking at Cradley, needle-making at Redditch, flint-glass manufacture at Stourbridge, nut and bolt manufacture at Darlaston, and saddlery and harness production at Walsall, to name only a few.[1]

When we consider the nature of the producing units in these trades we find some pointed contrasts. There were certain industries which required the association of large bodies of men for the manipulation of heavy materials, and which, from their inception, had been conducted in large establishments. The

[1] A detailed description of these local industries is to be found in S. Timmins, *Birmingham and the Midland Hardware District* (Robert Hardwicke, 1866).

sheet-glass and rolling stock factories employed upwards of 500 persons each; the constructional engineering works and the iron tube mills were necessarily extensive; while there were one or two light industries, such as the steel pen manufacture, in which, because the productive process involved the co-ordination of the labour of semi-skilled press operatives, the factory had made its appearance.[1] But the typical large-scale industry was iron manufacture. From the time of the application of pit coal to the smelting and puddling processes, this trade had tended to fall into the hands of great concerns, many of which were integrated in character. Thus, while in the 'sixties many small "jackey" pits, as they were called, were being worked on the thick coal measures, which outcropped in South Staffordshire, and while many small ironworks were operating, the greater part of the trade was in the hands of firms which not only obtained coal, iron ore and limestone from their own local mines, but which also controlled blast furnaces, forges and mills, and often produced finished products, like edge tools, as well. Some of these concerns are said to have employed as many as 5,000 men in the various branches of their business.[2]

Yet when we look at the small metal industries, which together employed the greater share of the local labour force, and which more than any other stamped the industrial character of the area, we find the small unit almost everywhere predominant. It is true that from the eighteenth century in almost every trade a few large factories, the creation of some organising genius, had flourished—the businesses of Boulton and of Clay are examples—yet such concerns were in the nature of magnificent exceptions rather than samples of the prevailing industrial pattern. There had been, in fact, no "industrial revolution" in the small finished goods trades. The great economic expansion of the area during the century preceding 1860 was marked by a vast increase in the number of its producing units rather than by a growth in the size of the existing few; and at a time when the heavy metallurgical and the textile industries had passed under the sway of machinery, the hardware manufacturers of Birmingham and district still pursued for the most part the older methods of hand production. A French observer in 1856 noted that, in

[1] S. Timmins, *Birmingham and the Midland Hardware District*, pp. 635, 669–70; "Birmingham Glass Works" in *Household Words*, March 1852; and F. W. Hackwood, *Wednesbury Workshops*, 1889, pp. 66–8, 94.

[2] S. Griffiths, *Guide to the Iron Trade of Great Britain* (1873), Chaps. IV–VIII; and R. G. Hobbs, "A Midland Tour" in *The Leisure Hour* (1872), pp. 282, 463.

contrast to the position in the northern centres of industry, the manufacturing class of Birmingham had not raised itself socially in any large degree, and that the concentration of capital and the development of large-scale enterprise had not taken place there.[1]

I propose to examine the leading small metal trades with the object of testing this generalisation, and in considering the workplaces of the time I will distinguish between three classes of producer: first, the "outworker," "garret-master," or domestic worker proper, who carried on his trade in a part of his dwelling-house with the assistance of members of his family or of an occasional journeyman; secondly, the workshop-owner, who employed up to forty persons in a converted dwelling-house in which no power machinery was used; and finally, the factory employer, who had a larger establishment, often built specially for the purpose of his trade, and who made use of power machinery. The representative concern in the section of West Midland industry which I am now examining fell within one of the first two categories in nearly every case. Thus, the largest of the small metal trades, the nailing industry, was essentially of a domestic character. The nailor commonly drew a bundle of nail rods at the beginning of each week from a factor's warehouse, provided his own fuel and the few simple tools which he required and, with the help of his family, he produced in a forge adjacent to his home a quantity of nails which were "weighed in" at the warehouse each Saturday.[2] Here and there the factors had erected in the vicinity of their warehouses nail-shops, which they rented to nailors who had no forge of their own;[3] but this was the extreme limit to which the capitalist had gone in this industry. The chain trade differed from the nail trade in some respects owing to the fact that the manufacture of certain types of chain necessitated the use of a power blast. Yet, although the heavy chain was made in factories, all other kinds were produced by shop-owners or by domestic workers under conditions similar to those in the nail industry.[4] With a few exceptions, the producing units in the Willenhall lock trade were of the same character; the nut and bolt manufacture of Darlaston was conducted in establishments employing from fifteen to twenty workers, or by single-handed outworkers; and much of the edge tool industry

[1] Léon Faucher, *Études sur l'Angleterre* (1856), pp. 502–3.
[2] E. Burritt, *Walks in the Black Country, etc.* (1868), Chap. X.
[3] *Children's Employment Commission* (1862), 3rd Report, p. 53 seq.
[4] R. H. Tawney, *Minimum Rates in the Chain-making Industry*, Chap. I.

and of the other hardware trades of the Black Country was organised in the same way.

The manufactures of Birmingham itself, however, present more interesting and peculiar features. The industries which have been described were engaged on comparatively simple products, of the type which a single workman could produce throughout; but Birmingham was concerned with a different class of article. The gun, jewellery and brass trades were all engaged on composite products, which called for many distinct processes and a variety of skilled labour. In all of them there was a highly subdivided labour force, yet—and here is a point I would emphasise—this was not inconsistent with the prevalence of the small unit. Thus, in the gun trade, the master gunmaker in most instances possessed merely a warehouse. He purchased parts in the shape of locks, sights, barrels and stocks from the "material makers," who were generally independent craftsmen working on a small scale, and these materials he gave out to a long series of "setters-up," each of whom performed a specific operation in his own workshop.[1] Similarly, in the jewellery trade, where the bulk of the industry was in the hands of shop-owners with under twenty employees, the firm which produced finished goods relied on outworkers or small firms to perform such operations as stamping, gilding, plating, rolling and stone-setting. In both of these industries there was, of necessity, a constant transport of semi-finished goods from one craftsman to another, and this led to the localisation of each of them within a special quarter of the town. In the brass trade the small unit was less universal. Firms engaged in producing tubes, wire, or sheet metal naturally required a power-driven plant and a fair-sized mill; while even in the manufacture of finished brass-foundry several large factories existed. Nevertheless, in this industry also the garret masters and the small shop-owners were numerous; for whereas in the factory the various processes could be conducted in separate departments under one roof, they could also be carried on economically in distinct businesses by specialists. For example, the small manufacturer could have his foundry work done out by a class of master called a Caster for Hire. He could obtain his stampings from a similar type of specialist; while such operations as required power, like polishing, could also be relegated to outworkers.[2] Indeed, the application of power machinery to certain processes during the first half of the

[1] S. Timmins, *Birmingham and the Midland Hardware District*, pp. 387–93.
[2] *Ibid.*, pp. 271 and 303.

nineteenth century had done little, in the leading trades, to change their system of organisation; for the small master was provided with opportunities of employing power without the necessity of laying down a plant himself. Buildings had been erected which were divided into separate workshops, through each of which shafting, driven by a steam engine, projected. Here manufacturers who required power for certain operations could hire the facilities they needed, and it was common at the time to see the notice " Power to Let " affixed to mills in the neighbourhood.[1] As a final example of the type of small-scale industry in which the productive process was highly subdivided, the saddlery and harness trade may be considered. While a few small factories existed to deal with the demand for standardised goods from the Government and from the export markets, the greater part of the industry, engaged in producing leather and metal parts which saddlers and harness-makers in each locality assembled, was carried on by little masters, each of whom specialised on some component, such as stirrups, bits, buckles, saddle-trees or bridles.

The causes of the survival of the small unit in the Birmingham and district industries are not difficult to discover. The economies of large-scale production are much less substantial in the small metal trades than in the textile or the heavy metallurgical industries which are concerned with homogeneous and standardised commodities. A great many of the Midland products were of an ornamental character. They possessed, of necessity, an individuality of design which was inconsistent with mechanical methods of manufacture. Certain industries, moreover, such as the gun and saddlery trades, were subject to great fluctuations in demand, which would have added greatly to the risks of an employer with a large factory. Under the existing system, the master gunmaker could throw the burden of depressions on to the shoulders of his outworkers and so escape the pressure of heavy overhead charges. Nor must technical factors be ignored. Even the small metal manufactures in which conditions were favourable for large-scale production required machinery which made much greater demands on the engineer than did that employed by the textile trades, and the reorganisation of the Midland industries has had to await the more recent developments of engineering and metallurgy.

The most remarkable feature of the industrial organisation of the time was the survival of the small unit in trades in which

[1] Léon Faucher, *Études sur l'Angleterre*, p. 506.

there was a high degree of division of labour. This phenomenon, it is true, was found in the early woollen industry; but the differentiation of processes had been carried very much further in several local manufactures (*e.g.* the gun trade) than it had been in the early textile industries. It might be thought that the better co-ordination of the various processes, which the factory would have ensured in such industries, would alone have led to the supersession of the little master. Yet it must be remembered that in those days men were restive under the yoke of factory routine, that it was difficult to induce them to forego their "Saint Mondays" and "Saint Tuesdays" and their habit of crowding six days' work into the last three days of the week,[1] and that the better co-ordination of different types of labour, which it was one of the objects of the factory to secure, was thus made extremely difficult. Until machinery had become a condition of economical production, the entrepreneur could obtain little advantage from the establishment of a factory. In trades, such as gun and saddlery and harness-making, in which the productive process, far from consisting of a series of consecutive operations, took the form of a number of independent efforts by skilled craftsmen, each of whom was concerned with producing a finished component for a composite whole, the economy of collecting the labour force in factories was negligible.

At this point I should like to consider briefly the figure who occupied a key position in the small-scale industries of the period, viz. the factor or the merchant. In the West Midland area the former term applied to middlemen who catered for the home market, and only those who dealt in the export trade were called merchants. Their main functions were similar to those exercised by their counterparts in all the small-scale industries. They supplied materials to the outworker, they financed the manufacturer by taking his products at weekly intervals, and often by granting him a loan with which he might purchase tools, and finally they marketed his manufactures. But the factor's part varied considerably according to the trade with which he was concerned. Thus, the nailing industry provides an example of the domestic system in its simplest form. There the nailmaster, who had a warehouse in each specialised nailing district, gave out the materials and paid weekly wages to outworkers who laboured, with little or no outside help, at their own forges. In many of the other hardware trades general factors with similar functions existed. When we come to the more complex industries, however,

[1] *Report of the Factory Inspectors*, April 30, 1874, p. 56.

the factor is seen to have had other duties to perform. Thus, the master gunmaker was not only required to have an intimate technical knowledge of his trade, but, since he had to co-ordinate the activities of a multitude of " material makers " and " setters up," he had also to come into close contact with the manufacturing operations. Similarly, the saddlers' and coachbuilders' ironmonger (the factor in the saddlery and harness trade) was responsible both for bringing together in his warehouse the various components which were produced by the little masters, and also for purchasing the hides and for supplying such of his craftsmen as were leather workers with the particular section of the hide which they required in their craft. In the jewellery trade, on the other hand, the co-ordination of the work of specialists was done mainly by the shop-owner and not, as in the gun and saddlery industries, by the factor. Single-handed craftsmen or garret-masters, moreover, who made such articles as wedding rings, found a readily available supply of reliable raw material in the shape of the sovereign, and so even they were independent of the factor in one respect. In this trade, indeed, the factor's functions were largely confined to distributing the products and perhaps to providing the makers with credit. Further, in many industries in which factories existed alongside the small unit, the duties of the factor were performed by the large employer, as in the chain trade where the orders for various types came to the manufacturer, who produced the large sizes in his factory and gave out orders and materials for the rest to shop-owners or single-handed workers. And there were, in every industry which produced composite products, many outworkers who never came into contact with the factor, because they were concerned with performing special operations for other manufacturers.

There was, then, a gradation from the factor, who was concerned with the distribution of products and with the financing of the little master, to the type who exercised an intimate control over the materials supplied to the workers, and who had to co-ordinate the labours of many specialist craftsmen. The fact that the craftsman in certain trades worked mainly for one master must not be taken to imply that his position was more subservient than that of the worker who was less permanently attached to a particular factor. The degree of the employers' control over the productive side of the industry, indeed, had little bearing on the economic strength and well-being of the worker. The latter's position was determined mainly by the degree of skill

required by his trade and by the ease with which outsiders could enter it. In the highly skilled industries the craftsman was in a position to make a good bargain with his factor, who would be loath to lose a valuable workman to a competitor; but in the less skilled trades, where there was frequently an over-supply of labour, the factors pitted one man against another in attempts to drive down prices. It was in such trades, where the workers' position was weak, that the "slaughtermen," "foggers" and "truck-masters" flourished. The well-being of the worker had, in fact, little or nothing to do with the extent to which the factor had assumed control over the industry.

I must now attend to my second theme, the methods of administration which were pursued in the larger units of the time; and it is interesting, in the first place, to consider their origins. We may trace the rise of the factory from two sources. From below, we may watch the outworker, who depends upon the factor for his materials and for the co-ordination of his work with that of others, develop into a shop-owner, who employs several workmen and who has assumed the task of co-ordinating the work of independent specialists, and then into a factory employer, who can contract with the factor as between equals, and who depends upon the latter merely to distribute his goods. Or, from above, we see the factor advance towards the position of a manufacturer when he builds workshops and rents these, together with the tools required, to his outworkers. He goes a stage further when, finding the demand for a certain class of goods outstripping the capacity of his men, or seeing that a particular line may be produced more profitably by machinery, he erects a factory for manufacturing that line, while he still continues to factor other classes of goods. Finally, as he takes up the factory production of other lines, his functions as a factor become subordinate. Yet, having arrived at the factory, we have not arrived at the modern type of factory. We have arrived at a stage in its organisation which I will call the "sub-contracting system," and which I want to describe in some detail. The significance of this system, which once prevailed throughout the majority of industries, and which still survives in many in some form or other, has received less recognition than might have been expected. But it must be considered in any study of industrial evolution, because it represents a definite stage in the growth of the modern factory.

The idea that the employer should find as a matter of course the plant and materials and should exercise supervision over

the details of production did not spring into existence as soon as the men had been drawn within the factory; and in the larger establishments of the period arrangements came into being which were obvious survivals of an earlier form of organisation, and which represented a transitional stage of development. Just as the typical manufacturer who had grown out of the factor remained at heart in his earlier capacity, and tried to hold himself aloof from the details of the productive process, so the employees brought into the factory the traditions of the domestic workshop. The various compromises which reflected the struggle of the employer and the worker to maintain their ancient relationship in a period of change are of considerable interest. The idea that the former's function was to supply materials, to pay for and to market the completed articles, whereas the worker's part was to provide the workshop and the tools, survived, when a factory was established, in the custom of charging deductions. Even in large concerns it was common for sums to be subtracted from the employee's wages for shop-room, gas and power, just as if those things were normally supplied by the worker and not by the capitalist. In the few factories in the lock trade deductions were made for "standings and light," which persisted right down to the War. In the brass-foundry trade charges were made to cover the cost of light and power; in the foundries the head caster had to pay for the use of the sandmill which had superseded the pestle and mortar; while a rent for shop-room was often required from the head of a gang.[1] In the flint-glass trade of the period a deduction of 12*s.* was made from the weekly wages of workers in the cutting shops to pay for the power which had been introduced to take the place of the old method, according to which the machinery had been set in motion by a boy-assistant who turned a handle.[2]

The chief feature of this stage of industrial organisation, however, was associated with the sub-contracting method, which had long existed in all industries in which the large unit was found, from the coal and iron trades to the manufacture of brass goods and cut nails. According to this system of organisation, there was an intermediate class of men who acted as a buffer between the employer and the workers. Termed "sub-contractors," "overhands," "fitters," "charter-masters," "butties," or "piece-masters," according to the industry with which

[1] *Brass Trade Arbitration Report*, 1900 (Birmingham Reference Library), Fifth Day's Proceedings, pp. 33, 47, 60–1.

[2] "Labour and the Poor" in *The Morning Chronicle*, December 23, 1850.

they were connected, they all had much the same general function to perform. This was to contract with the factory-owner to produce a certain quantity of output for a fixed sum, and then to engage, pay and supervise workers for the task. The relation of the overhands to the employer in these larger establishments was similar to that between the shop-owners and the factor in the small-scale industries. The details of their duties varied from trade to trade. In some cases they had large numbers of underhands, whom they provided not only with tools but with certain raw materials as well, and they thus relieved the employer of a great deal of responsibility and of capital expenditure. Elsewhere they were little more than skilled men who, though hiring a few assistants, relied on the factory owner for all the tools and materials required.

The practice of sub-contracting involved the wage-system in all kinds of complications. After the overhand had made his bargain with the factory-owner, the former alone was concerned with fixing the wages of the subordinate labourers; but he could not claim payment from the employer until the quantity of work contracted for was completed. Yet neither he nor his men could afford to wait several weeks without money in cases when the work was spread over a long period. So, to meet such difficulties, it became customary for the overhand to draw on the employer at each week-end for a sufficient sum to provide a reasonable wage for himself and his underhands. When the work was completed, then the price contracted for was balanced against the weekly drawings, and the remainder was paid over to the sub-contractor and represented his profit. In trades where his economic position, relative both to workers and employer, was strong, the sub-contractor gained very high rewards; but sometimes the employer was in a position to drive down the sub-contractor's prices and, apparently, he occasionally fixed the weekly drawings without consulting the overhand. This system of "blind piece-work," as it was called, often led to the sub-contractor being in debt to his employers at the end of a job.[1] In any case, however, a double wage contract was involved, that between the employer and the overhand, which was for a piece-wage, and that between the overhand and his subordinates, who were usually paid day-rates. The functions of the entrepreneur were, in fact, in some measure shared between the two parties.

The advantages of the system to the employer are obvious. If wide functions devolved on the overhand, the manufacturer

[1] *Brass Trade Arbitration Report*, First Day's Proceedings, pp. 75–86.

had no need to concern himself with the supervision of his labour. He required no large administrative staff and no elaborate costing system, and he could keep his overhead charges to a minimum. His position, in fact, approximated to that of the factor. The method of organisation might not be applicable to industries in which the productive process required the co-ordinated activity of large numbers of semi-skilled workers; but few local trades in 1860 were of that type. In such as did exist, *e.g.* the pen trade, the sub-contracting system was absent.[1]

That there were serious disadvantages attending the system cannot be denied. It was frequently declared that the overhand sweated his men and made disproportionately high gains himself. Yet for this the employer was partly responsible; for he had every inducement to drive a hard bargain with the sub-contractor, since the odium of low wages which necessarily resulted would be directed against the sub-contractor rather than against the employer. This fact, that the employer was a more remote figure in the wage contract than he is to-day, is of great significance; for, in the comparatively small factory, the public opinion of the workers has a more powerful influence on business policy than is generally realised. As to the overhand's high earnings, it must be remembered that he possessed wider functions and suffered greater risks than the modern foreman.

From the standpoint of business efficiency the system had many faults. Since the whole process of producing a finished article often had to be performed by the sub-contractor and his gang, it was impossible to set up separate departments within the factory for performing each operation, or to take advantage of the economies of dividing the processes among specialist workers. Each sub-contractor might have certain machines alloted to his use, and while he and his underhands were performing other operations, these might be idle. Much time was lost while the sub-contractor was obtaining materials for his work; and, as was pointed out by a trade union secretary, "if a workman has to supervise a large shop, he is supposed to look out his work, look up patterns, and do a great deal which would be done for him by a general man" in a modern type of establishment.[2] Finally, the overhands, who were almost invariably sceptical of new methods, would oppose change, and the employer, fearing to arouse the hostility of his key men, could exercise in many industries little control over

[1] "Labour and the Poor" in *The Morning Chronicle*, December, 16, 1850.

[2] *Brass Trade Arbitration Report*, Third Day's Proceedings, p. 57.

them. Thus the system was disadvantageous inasmuch as the principle of the division of labour could not be extensively applied, an uneconomical use was made of the plant, and reforms in productive methods were difficult to effect. Yet, in the early days of the factory, when no costing system, no trained office and works staff, and little experience of centralised management existed, it is hard to see how the sub-contractor could have been dispensed with. Once established, the system was difficult to change; for any attempt by the employer to relegate his overhands to the position of the modern foremen would arouse their bitter opposition. In conclusion, it should be noted that the existence of a sub-contracting class provided a stepping-stone by which the workman might rise to the position of an independent employer, and many of the new businesses during the latter part of the nineteenth century were founded in this way.

From this account of the administration of such factories as existed during the 'sixties, I must return to a consideration of the small-scale industries and to their subsequent history. This I can treat only in outline. At once it may be said, however, that not until the later 'eighties did any fundamental changes occur in the organisation of the small metal trades. During the twenty-five years following 1860 the only industry which was transformed was the manufacture of the military rifle. This, by 1872, had definitely left the workshops of the old gun trade and had come to be produced in great factories—a change which had been made possible by the introduction of the "interchangeable rifle," *i.e.* an arm produced by the assembly of standardised, machine-made parts.[1] With this exception, however, the organisation of the small metal trades remained unaffected. This conservatism, as already explained, was due in some measure to the fact that many of the products, being individual in character, could not be economically produced by machinery, and so the large unit had no marked advantage over the association of independent little masters. But there was another cause which I here wish to emphasise. Up to the 'eighties, when cheap steel first became available, the staple raw material of the trades of the area had been wrought iron. This did not lend itself readily to manipulation by machine tools and presses, and so, even where the nature of the products imposed no obstacle to mechanical production, there were serious technical difficulties to be overcome. To give one instance, a power press had been

[1] Artifex and Opifex, *Cause of Decay in a British Industry*, 1907, Chaps. I and II.

introduced into the tinplate ware trade from the United States in 1870; but this could not be used extensively until that industry had given up wrought iron in favour of steel sheets.[1] The coming of cheap basic steel, then, removed a hindrance to the advance of mechanical methods which during the 'nineties began to be extensively employed for the first time in a variety of local trades. The introduction of this new material was, indeed, of the utmost significance; for it resulted in carrying the factory system into a group of industries which had remained unaffected during the earlier phases of the industrial revolution. At the same time, a change began to occur in the type of article required for domestic fittings, for which so many Midland trades catered. Elaborate and massive products began to give place to light and cheap articles. This tendency was particularly noticeable in the brass trade, especially when electric lighting began to spread; for the result was to create a demand for small machined parts instead of for cast ornamental gas fittings. An opportunity was thus given to the manufacturer to produce by presses and machine tools what had previously been made in the foundry and finished by hand.

Yet this was not all. The great depression which lay on British industry during the ten years following 1875, with only a short prosperous interval from 1880 to 1882, dealt hardly with the West Midlands. During that period, not only was the old iron trade overwhelmed, but many of the most ancient finished manufactures began to suffer for the first time from foreign competition. The button, gun, wrought nail and glass trades, to name only a few, declined in magnitude,[2] and all had to struggle for their existence; for the age of unchallenged British supremacy had given place during that period to an era of international competition. The effect on the organisation of the West Midland industries was twofold. In the first place, manufacturers were stimulated into seeking for cheaper methods of production, which they found in machinery, and, secondly, the older and more conservative small metal industries began to lose their predominant position among the district's trades. By the end of the century the loss of foreign markets and changes of fashion had carried this movement still further by injuring such manufactures as tinplate wares, saddlery and harness and metal

[2] W. H. Jones, *Story of the Japan, Tinplate Working and Galvanising Trades in Wolverhampton*, 1900, pp. 134–7.

[3] C. J. Woodward, "Manufacturing Industries" in *The British Association Handbook* (Birmingham Meeting), pp. 181, 198–9, 202.

bedsteads. In place of these industries, a number of new trades were rising to occupy the leading positions, among them being the cycle, the electrical engineering, the machine tool, and the food and drink manufactures. Early in the next century the motor and the artificial silk industries made their appearance as important branches of the local economic life. These industries were for the most part conducted in large establishments. Being new, they cared little for the traditions of domestic industry, and they were ready to adopt new methods of administration and control as well as the latest mechanical devices. The advance of the new engineering trades, moreover, had an important influence on the hardware producers; for there was created a big demand for engineering components which the small metal industries, now that the demand for their former products had fallen, attempted to meet. These components were of a more standardised character than were the older hardware products, and the employment of machinery was thereby facilitated. The shifting of emphasis from hardware to engineering components may be noted in nearly all the older industries; but the change from the production of domestic brassfoundry to that of motor accessories may be offered as a typical illustration. Thus, by 1914, the small unit was no longer typical of the West Midland area, nor even of the majority of its small metal trades, although it was still common in many of them. The change had been caused not only by the increase in the size of the representative businesses in the older industries, but also by a change in the relative importance of the different manufactures. New industries, conducted on a large scale, had come to the front; while the nail, gun and saddlery and harness trades, to mention the typical small-scale manufactures of the 'sixties, had shrunk to small proportions. The only large industries in which the outworker and shop-owner maintained their ground were those, like the chain trade, which continued to use wrought iron as a raw material, or the ornamental trades, like jewellery. Even in this last instance, moreover, small factories began to encroach on the sphere of the workshop during the decade preceding the War.

The transition from the workshop to the factory was facilitated during the last two decades of the nineteenth century by the introduction of the gas engine, which played a part in the history of the small metal trades analogous to that of the steam engine in the development of the staple industries of the country. When, as in the 'sixties, the steam engine had been the only form of prime mover available, except in districts where water power was

still used, then the small manufacturer had been reduced to the necessity of hiring power when he required it; for the running cost of the steam engine was too great for him to bear. The gas engine, however, gave him just the type of power he needed in a convenient form, and by the late 'eighties we find it declared by a factory inspector that the system of hiring power was rapidly dying in the West Midlands, and that manufacturers in many industries had recently introduced gas engines.[1] Not only did the new type of engine permit manufacturers with a comparatively small capital to employ machine tools, but it also had a great effect on the organisation of all trades in which the productive process was complex and had previously been split up among a multitude of independent specialists. For the adoption of the gas engine meant that power was now available in many workplaces for the performance of a whole series of operations, and so gradually there occurred an integration of the various processes of manufacture and a consequent rise in the scale of production of the representative firm.

These tendencies would not have been so apparent if there had not occurred, in this district as elsewhere towards the end of the last century, a great improvement in urban transport. Before the era of the tramcar and bicycle, manufacturing establishments were necessarily confined to the heart of the Midland towns; for, unless they were in close proximity to populous districts, they had great difficulty in recruiting their labour. But the centres of the old industrial towns were congested; the existing workplaces were old-fashioned in lay-out and ill-suited to modern productive conditions; and sites were not available for extensions. The acceleration of urban transport, however, enabled the manufacturer, who wished to modernise his plant and to increase his scale of production, to establish himself in industrial suburbs, where cheap land could be had, and to undertake himself operations which had previously been left of necessity to specialists.

By the 'nineties these changes had considerably modified the functions of the factor and the merchant. When the typical manufacturer had been a man without much capital, the factor had controlled industry because the producer had been financially dependent on him. The factor had then been looked to for the provision of materials and, sometimes, of tools. He had bridged the whole period between production and sale by taking the goods at weekly intervals. It was he who normally provided the considerable working capital which was required in the manu-

[1] *Report of Chief Inspector of Factories*, October 1889, pp. 30, 32.

facture of articles which were complex in character and which passed through the hands of numerous small masters in the course of production. But, as the producing units grew in size, the representative manufacturer became a person with enough capital to purchase his own raw materials, to assume the task of co-ordinating the different productive operations, and even to keep stocks of finished goods; while he was of sufficient standing to treat directly with the banks when he needed credit. What is more, the producers began to trespass on the factor's functions even in the sphere of marketing. Though they might still deal through factors, they began to attempt to influence their customers by the appointment of their own agents and travellers, and thus by the end of the century the factor had lost his dominating position in most of the local trades and was rapidly being reduced to the position of a mere wholesale merchant. In industries in which the small units survived alongside the large firms, and in which the factor had still a part to play, his functions often came to be exercised by the larger manufacturers, who, as we have seen, had frequently developed from factors.

The War gave an immense stimulus to the forces which were transforming the character of West Midland industry. Many of the older hardware trades, in which machinery was only just beginning to play an important part in 1914, were forced to adapt themselves to the quantity production of munitions, and the mechanical equipment of the area was enormously increased. Since 1918, certain of the new industries, including the motor, cycle, electrical engineering, tyre, artificial silk, and the food and drink trades, have made a great advance, and there are several factories in the area which now employ from 5,000 to 12,000 men each. The rise of the motor trade has not only resulted in the appearance of a number of great concerns for the production of cars and cycles, but it has led also to the large-scale manufacture of parts and accessories by a multitude of firms which previously confined their activities to hardware. There is scarcely any local trade in which the units have not changed their methods and their scope of production to meet the needs of the new industries. The effect of the appearance of the mass-produced car on the local foundries, for instance, may be seen in the great extension of die-casting and machine moulding—processes which are entirely dependent on a quantity demand; while an illustration of how several of the older trades, which were previously conducted on a small scale, have been influenced, is provided by the laminated spring industry. Until recently this trade was carried on entirely

in small factories and workshops, and little use was made of machinery. The demand for great quantities of standardised springs by makers of the cheap motor-car, however, has resulted in the rise of large factories equipped with plants for turning out springs on mass-production lines. While the new large-scale industries were advancing, the War and the post-War depression have seen a positive decline in several of the older trades, including some of those which had remained progressive up to 1914. Among these are such manufactures as jewellery and chains, which are still the home of the small master.

Thus, just as the Great Depression marked the end of the wrought-iron age and of the Birmingham area's unchallenged supremacy as a centre of the small metal trades, so it saw the beginning of a new stage in the development of industrial organisation. From then onwards handicraft, which formerly played such a large part in the finished manufactures, began to give way to the machine; the process of production, hitherto sub-divided among a host of specialists, began to be conducted under one roof; and the small unit lost ground to the factory. These associated movements I have attributed to a conjunction of causes, viz. the introduction of cheap basic steel and of the gas engine, the change of fashion in domestic fittings, the improvement in urban transport, the stimulus of foreign competition, and finally the change in the type of industry conducted in the area, which removed conservative influences.

In a generalised historical account such as this, there is a danger of over-emphasising the extent of the transformation which has taken place and of giving the impression that a form of organisation which has become typical is universal. It should be made clear, therefore, that in several industries the representative factory is still the small factory, and that opportunities for the shop-owner, or even for the outworker, are still afforded by certain sections of trades in which the large factory is the rule. Many of the more ancient industries, moreover, have never been completely transformed by machinery. The small unit is still very common in the manufacture of jewellery, chains and leather goods. The old sporting gun trade has changed its methods of production but little in the course of a century. But these once staple manufactures no longer occupy a primary place, and their organisation cannot, therefore, be counted typical of the present industrial life of the district.

In conclusion, I must revert to the system of administration within the factories. Here the changes which came about were

very gradual; yet, in most of the industries, we can follow the slow emergence of modern methods. With the rise of machine production and with the greater division of labour, the skilled craftsman began to give place to the semi-skilled operative, and there grew up of necessity a more centralised system of control. As the scale of production became greater, and as the difficulties of co-ordination were thereby increased, so more and more functions devolved upon the management. As power machinery became a usual feature of the work-place, and as the traditions of the domestic system died, the practice of charging deductions for shoproom and power ceased. With the application of metallurgical science to manufacture, functions previously carried out by the overhand according to empirical methods passed to the works laboratory. From about 1890, in fact, the sub-contracting system in most industries began to decline, and the authority once vested in the overhand began to be assumed by the central management and the technical staff. Yet, if the system was slowly dying, the local trades could still furnish many instances of it in 1914. Some employers clung to the system because it relieved them of responsibility and reduced the duties of management; while the sub-contractors opposed their relegation to the position of the modern foreman. Where sub-contracting survived, however, it was generally in a modified form. Even when the overhand was left with important functions, the practice arose of paying all the men through the office and, in some instances, the wages of underhands came to be regulated by trade union agreements or by pressure from the masters.

The War dealt a great blow at this decaying system of organisation. The new methods of production which the needs of the nation enforced, and the change in the personnel of the factories, ended many anachronisms; and where the system survived the War, the general reduction in the working day in 1919 and 1920, which involved for many trades a reorganisation of the manufacturing process and a speeding up of production, brought the sub-contracting system to an end in the majority of the small metal industries.

G. C. Allen.

A SHORT HISTORY OF TOBACCO SMUGGLING

The smuggling of tobacco undoubtedly began when it first became profitable, when James I, out of his hatred of the weed, placed an imposition of six shillings and eightpence upon each pound of it imported. A great deal was smuggled ashore by the crews of vessels tied up in port, and some was probably transferred to small boats before the inbound vessel docked.

In the absence of any custom force to prevent the running of goods in the outports, or to prevent tobacco being taken ashore from vessels in dock, some other measure had to be adopted to check the illicit trade. This was done by the king in a proclamation for the garbling of tobacco issued in 1620, providing for the "viewing" of all tobacco, which, upon the payment of custom and impost, was to be sealed by the officers, and penalties of forfeiture and Star Chamber provided for the sale of unsealed tobacco.[1]

Smuggling, however, continued. In 1625 a petition was presented to the king from the ". . . apothecaries, grocers and other retailers of tobacco about London." "Lewd persons under pretence of selling tobacco keep unlicensed alehouses and others barter with mariners for stolen and uncustomed tobacco, to the disadvantage of the petitioners." They had been advised by the late king to apply to Parliament, and a Bill had been drawn but no action taken.[2]

When restrictions were placed upon the importation of Spanish tobacco smuggling increased greatly. Large quantities were run ashore in the usual way, and a great amount came in under the guise of plantation tobacco. Tobacco was carried from the Spanish West Indies to the Bermudas and there reshipped for England, entering as the product of English colonies. In 1626 the Governor and Council of Virginia wrote to inform the Home Government that the "petty English plantations on the savage Islands in the West Indies . . . export large quantities of Spanish tobacco."[3] The customs officers could not with certainty identify tobacco as Spanish or colonial. In 1651 some Jamaica tobacco was mistakenly seized by them as Spanish, and only the fact

[1] Rymer, xvii. 233.

[2] *C.S.P.* (*Domestic*), 1625–26, p. 204.

[3] *C.S.P.* (*American*), 1574–1660, p. 79.

that the owner was prepared to sell it for a shilling a pound convinced them that it was really what it claimed to be.[1]

In the course of ten years from 1624 a number of proclamations were issued dealing with the smuggling of Spanish tobacco. In September 1624 James increased the penalties for smuggling; "some . . . have ymported secretly and by Stealth great Quantities of Foraign Tobacco for which they have payed noe subsidie or other Dutye unto us." No person is to buy any foreign tobacco. All imported tobacco is to be landed at the Customs quay of the Port of London and none to be landed elsewhere. Shipmasters are made responsible for smuggling. The proclamation further sets forth the right of seizure and apprehension bestowed upon custom "searchers" and the penalties for violation of the law.[2] The clauses relating to seizure of contraband tobacco, and to the methods of sealing that properly imported, were repeated with further elaboration a month later.[3] The following March these previous proclamations were again reviewed. In addition the king announced that an inquiry would be made respecting smuggling. All subjects were to have profferers of smuggled tobacco arrested. Informers would be given half the value of tobacco they caused to be seized.[4]

Despite James's threats tobacco continued to be smuggled. Soon after his accession to the throne Charles repeated these proclamations. "Certain persons have secretly imported much tobacco not grown in these places (Virginia and Somers Islands). No person is to use this foreign tobacco or receive it under pain of law and of Star Chamber." [5] Finally, the extent of the smuggling of Spanish tobacco persuaded Charles to revoke the proclamation against its importation. "Spanish tobacco is so much appreciated that it is Smuggled and the Revenue from it lost. In future 50 thousand-weight of Spanish tobacco may be imported by the Commissioners only as Royal merchandise." [6] The prohibitions and penalties are reviewed in proclamations of August 1627 and January 1631, but there is no reason to believe that these were any more conscientiously obeyed than their predecessors. In that of 1631 Charles says that an ". . . incredible quantity of Brazil and Spanish Tobacco is imported." It is also illegally brought in from Jersey and Guernsey.[7]

In 1660 it was brought to the attention of the House of Commons that much tobacco was being smuggled. "The house

[1] *C.S.P.* (*American*), 1574–1660, pp. 458, 459. [2] Rymer, xvii. p. 621.
[3] *Ibid.*, p. 633. [4] *Ibid.*, p. 668.
[5] *Biblio. Lindesiana*, 1415. [6] *Ibid.*, 1505. [7] *Ibid.*, 1516, 1629.

being informed that great quantities of Spanish tobacco lately imported have been landed and secretly conveyed away by several persons without due entry or paying of customs or Excise . . ." It was ordered that the Sergeant-at-Arms, "himself or his deputies, do forthwith seize, inventory and secure the said tobaccoes wherever they shall be found." [1] At this time the Government depended largely upon the interest of private individuals for the enforcement of the law against smuggling. Whoever chose to prosecute a case and was successful received a certain proportion of the confiscated tobacco, or its value, as his reward.[2] But the procedure was expensive and it was not profitable to prosecute when the amount of smuggled tobacco was not great. In the preface to the *Index Vectigalium*, a work published in 1670 on customs duties and procedure, the author remarks on this and concludes: "Some easier and cheaper way of proceeding against small and dubious cases" is necessary, ". . . since the charge deters all men from prosecution. The aggregate sum of all these small offences costs the revenue more than downright smuggling." [3]

The so-called "downright smuggling" was quite extensive. Ships from the plantations, especially those of lighter burden, could quite easily put in at the smaller outports, or at isolated creeks and estuaries, and there unload their dutiable goods. In 1655 quantities of tobacco were smuggled into Glasgow. One vessel with "Elephants teeth" and tobacco valued at £1,800 arriving in the Clyde, "the goods were carried by fraud into cellars in Glasgow." [4] But by the time information of this sort reached the officers of the customs the goods were long since dispersed and they were powerless to apprehend the offenders.

In 1692 a number of importers of tobacco had published an *Essay on Bulk Tobacco*, or "Some reasons why bulk tobacco from Virginia and Maryland ought to be prohibited from being exported thence or imported into England." Considerable quantities of tobacco were exported from the plantations in loose bundles. This manner of shipping was wasteful, as it involved certain damage to a proportion of the tobacco by salt water and otherwise, but it persisted largely because it facilitated smuggling. "It is the only tobacco run by seamen." It is

[1] *Commons Journals*, viii. 134.

[2] Proclamation 2 Mar. 1624–5; *Biblio. Lind.*, 1398, 9 Nov. 1624; Rymer, xvii. 633: and others. Similarly 10 & 11 Wm. III. c. 21, where one-third of fine of 6*d.* per pound of tobacco "to seizer and prosecutor."

[3] *Index Vectigalium*, preface.

[4] *C.S.P.* (*Domestic*), 1655–56, p. 63.

smuggled into the creeks and havens along the coast, thus evading the duties.[1] Or if the ship does come into port, " . . . every sailor and woman and little inconsiderable person can buy Bulk on Board the ship and Squeeze over by little design part of the duties if not wholly run it, and then carry it from shop to shop and sell it at easy and low rates." [2] As a result, within the last twenty years the legitimate merchants who imported large quantities of tobacco and sold it both wholesale and retail, and always had large stocks on hand, have been ruined and " destroyed." [3] Tobacco is sold in London " . . . 1½*d.* per lb. cheaper than such paying their just dues could afford it." [4]

The demand of whole districts for tobacco is said to have been supplied by bulk tobacco. In Newcastle and York it was peddled from door to door upon pack-horses at prices below those prevailing in London. The demand in the north of Ireland and west of Scotland was " . . . fully satisfied with Bulk Tobacco." [5] In the end the efforts of the merchants were successful and Parliament passed an Act prohibiting the importation of bulk tobacco.

Parliamentary action to check smuggling began in 1662, and was aimed first at the smugglers of Kent, who brought in tobacco overland from ships on their way to London. " No vessel arriving from beyond sea shall be above three days coming from Gravesend to the place of her discharge in the Thames, nor touch at any place between Gravesend and Chesters Key." Vessels touching at the outports were to come direct from them to place of unloading upon penalty of £100, the master to take oath to do so. The Act further provides for the making by the master of declaration of his lading and all particulars, and penalties are provided for evasion, or for false entry, by officers of the customs as well as by the master.[6]

To check the smuggling from Scotland it was provided that " All goods coming from or going into Scotland shall do so through Berwick or Carlisle and there pay Custom and Subsidy." [7] Ireland continued a source of supply for English smugglers, and in 1670 an effort was made by Parliament to put a check on this trade by a modification of 12 Car. II. c. 18, which required ships loaded in the colonies to give bond to bring all their goods to Great Britain or Ireland. In future all ships were to bring their tobacco to England; " the word Ireland shall be omitted for that pur-

[1] *Essay on Bulk Tobacco*, p. 140.
[2] *Ibid.*, p. 147.
[3] *Ibid.*, p. 147.
[4] *Ibid.*, p. 141.
[5] *Ibid.*, p. 145.
[6] 13 & 14 Car. II. c. 11; Wingate, p. 139.
[7] Wingate, pp. 143–44.

pose." [1] Similarly, in 1695, in an Act which reviews that of 1670, reference is made to smuggling from Ireland and Scotland, and it is provided that the " . . . product of the Plantation is not to be put on shore in Scotland or Ireland unless duties first paid in England." [2]

A few years later measures were taken to check smuggling by prohibiting the importation of bulk tobacco. Parliament decreed that " After 29 September 1700 No Tobacco shall be imported from the Plantations or shipped there but in a cask, chest or case each containing 200 weight of neat tobacco at the least at 112 lb. weight per Hundred, on pain of forfeiting such Tobacco and 6*d*. for every pound weight thereof." [3]

The first customs force was instituted in 1698, when some three hundred " riding officers " were appointed. Their original duty was to check the export of wool from the southern coast, but they were expected to prevent smuggling of all sorts. To assist them when necessary they might get the co-operation of detachments of dragoons. As a check against the smuggling of tobacco this force can never have been very effective. There was about one officer for every four miles of coast. They were disliked by the local population, the soldiers hated the work and sympathised with the smugglers when not actually assisting them.[4]

It is this fact more than anything else that explains the extent and prevalence of smuggling; the smuggler and not the customs officer had the support of public sympathy. In the early period smuggling was but little concealed, there were none of the elaborate subterfuges and devices of the nineteenth century. The smuggler went his quiet way undisturbed by troublesome Government officials.

In Kent and Sussex, where proximity to London rendered smuggling most profitable, the smugglers were driven to the use of force early in the eighteenth century, but in the more outlying counties the peaceful, " honest smuggler " persisted even into the second half of the nineteenth century. A story illustrative of the view that was commonly taken of smuggling in the eighteenth century is told by Hawker. A visitor to a coast town in Cornwall chanced to arrive on an evening when a landing of contraband was in progress. The vessel was anchored a little off shore, and the whole populace was engaged in ferrying the goods ashore and carrying them up the beach to the town. The traveller was

[1] 22 & 23 Car. II. c. 26.
[2] 7 & 8 Wm. III. c. 22.
[3] 10 & 11 Wm. III. c. 21.
[4] Shore, p. 142.

somewhat shocked and asked (to quote the conversation as given):

"Cannot a justice of the peace be found in this fearful country?"

"No, thank God, none within eight miles."

"Well, then, is there a clergyman about?"

"Aye, to be sure there is."

The traveller resolved to seek him out and inform him of the illicit activities of his parishioners.

"Where can he be found?"

"That's he, yonder with the lanthorn."

There he was, sure enough, perched on a rock showing light to a busy congregation.

Stories of this sort could be multiplied indefinitely. It has never been considered a serious matter to evade the customs, nor is it to-day. The commissioners of the customs in their report for 1857 wrote: ". . . smuggling has greatly diminished and the public sentiments with regard to it have undergone very considerable change. The smuggler is no longer an object of general sympathy;" but their confidence in the probity of their fellows was not sufficient to make them suggest the cessation of those measures that had made smuggling unprofitable. "Smuggling proper is now almost entirely confined to tobacco, spirits and watches," we are told, the only things left on which the profits of smuggling were sufficient to repay the labour and risk involved.[1] In the suppression of smuggling public conscience needs the support of customs officers and law-courts to be at all effective. Lord Holland's remarks on smuggling in a debate in the House of Lords are still true: "It is impossible totally to prevent smuggling; the interested motives of mankind will always prompt them to attempt it, particularly when taxes are extremely high, and the hope of a large profit is a temptation sufficient to make light of any risk. All that the legislature can do is to compromise with a crime of which, whatever laws may be made to constitute it a high offence, the mind of man can never conceive as at all equalling in turpitude those acts which are breaches of clear moral virtue."[2] Modern facilities of transportation and communication have rendered the suppression of smuggling more effective than Lord Holland could have imagined possible, but his statement remains still essentially true.

[1] *Customs Commissioners' Report*, 1857, p. 39.

[2] *Lords Journals*, July 9, 1805.

As, gradually, it became more and more difficult to smuggle in the contraband directly from the ships that brought it from the plantations, and these ships were not allowed to land their tobacco either in Scotland or Ireland, the smugglers found it necessary to look about for other bases from which to work. They then hit upon the ingenious idea of using England itself; this they were enabled to do because of the drawback of duty allowed on tobacco exported from thence. And so it happened that frequently the drawback was paid on tobacco, ostensibly for foreign ports for which the clearance papers were made out, but actually destined to be landed in Ireland or upon some point on the south or east coast of England, from whence, by devious channels, it found its way to the English consumer. In London this smuggled tobacco was retailed by small tobacconists and in the coffee-houses, elsewhere it was to be had from peddlers or hawkers who were in close touch with the smugglers and peddled their contraband for them. These hawkers had definite circuits throughout the countryside which they covered at regular intervals. A system of distribution surprisingly well organised and efficient seems to have developed about the beginning of the eighteenth century.[1]

In 1730 a writer upon smuggling, who says that " . . . the smuggling trade has of late surprisingly increased," argues that if adequate measures were taken to suppress these hawkers and peddlers, the smugglers would be " . . . utterly at a loss and not able to put off their goods," but as nothing has been done, " these clandestine traders have increased," and are now to be met with everywhere.[2]

The state of affairs was brought to the attention of the legislature, and further measures were taken to protect the revenue from the loss consequent upon fraudulent relanding of tobacco in England and Ireland. " It hath been found by experience that great quantities of such tobacco . . . have been privately relanded in this realm," and that the remedies already provided are insufficient.[3] Relanded tobacco shall be seized and forfeited and a fine of double the value of the drawback incurred by any persons connected with the relanding. Vessels, boats, horses and other cattle, carriages or carts used in transporting it will be confiscated. Informers to receive half the value of confiscated goods. It is worthy of remark that in this, as in subsequent Acts, penalties are provided for officers of the customs who are found conniving with the smugglers. This Act provides that

[1] *State of the Inland Trade.* [2] *Ibid.*, pp. 36 *et. seq.* [3] 8 Ann. c. 14, s. 16.

they shall be incapacitated for further employment in the service and in addition liable to imprisonment for six months.[1]

In the old customs the salaries were nominal, the chief remuneration for officers being the fees they collected for their services. This method of payment, by putting on a money basis the transactions between officer and importer, encouraged bribery, as it was easy for an importer to increase the fee in return for special services and for the officer to accept it with little fear of detection. A large part of the smuggling was carried on with the knowledge of the customs force and with the active co-operation of some members. In Kent and Sussex throughout the eighteenth century collusion between customs and smugglers was general, and when the Government greatly increased the rewards for information leading to seizures so that they were more than the value of the tobacco seized, it took the form of prearranged seizures, the reward being shared with the smugglers.

Sometimes the agents of the customs did a little tobacco running on their own behalf. This is said to have been particularly true of Cornwall, where the customs forces were regularly engaged in the trade, but was by no means confined to that county. As late as 1824 a revenue cutter, the *Rose*, and in 1830 another, the *Nimble*, were caught carrying contraband tobacco to England.[2]

To increase the difficulties of smuggling from Ireland, or of tobacco cleared for Ireland being relanded in England, it was provided that no debenture should be allowed for tobacco shipped to Ireland until a certificate had been received from the collector in Ireland of the landing of the tobacco there.[3] Moreover, no drawback was to be allowed on tobacco exported anywhere in vessels whose burden was less than twenty tons.[4] By 6 Geo. I. c. 21, the penalties for landing tobacco in Ireland when it had been cleared for foreign ports were increased,[5] and additional powers of search were given the customs officers. Customable goods found in any " bark, hoy, lighter, barge, boat or wherry," or " coming from the watersides," or found in any " house, shop, cellar, warehouse, room or other place," to be seized and placed in His Majesty's warehouse until the claimants have made proof " that the duties have been paid or secured, or that the same have been brought in, in the legal course of trade." [6] The burden of proof to rest with the claimer, but " if the verdict pass for him he shall have reasonable costs," and may sue if his goods have

[1] 8 Ann. c. 14, s. 17.
[2] Shore, pp. 177–9.
[3] 8 Ann. c. 14, s. 18.
[4] 8 Ann. c. 14, s. 20.
[5] 6 Geo. I. c. 21, ss. 49, 50.
[6] 6 Geo. I. c. 21, ss. 39, 40.

suffered damage.[1] Ships of less than fifty tons burden may be boarded by officers if they are thought to be intending to run goods into Ireland, and security taken to proceed on pretended journey.[2]

Further restrictions were imposed in 1703 and 1730. Drawbacks would not be paid on unmanufactured tobacco unless exported in casks of not less than three hundred pounds weight. It was not to be carried coast-wise from any other port than place from whence certified.[3] Officers were given power to "enter, examine and unlade" any suspected ships.[4] No tobacco could be imported to Ireland from the plantations.[5]

Early in the eighteenth century smuggling was particularly rife and the peaceful smuggler was displaced in many parts by gangs of ruffians. This took place when the customs forces first began to make themselves felt; the smugglers met force with force. The first outrages were on the water. In the years 1702 and 1703 some smugglers hit upon the idea that it was cheaper to steal their tobacco than to pay for it, and accordingly went in for piracy. Two Liverpool ships carrying tobacco were taken and plundered in 1702, some of the crews being killed by the pirates.[6]

But the scene of the worst outrages was undoubtedly Kent. Here the notorious Hawkhurst gang operated; while they probably had close connection with the boats that supplied them with tea, tobacco, spirits and silk, and were perhaps represented among the owners and crews, they chiefly acted as receivers and distributors, running the smuggled goods ashore, transporting and storing them, and finally delivering them to customers in London and elsewhere.

The Hawkhurst gang were widely hated and feared. They kept the countryside in subjection and wreaked their spite alike on civilians and officers of the law. Innocent villagers were done to death for looking at them in a suspicious manner or for asking unnecessary questions. The inhabitants of the village of Godham, having incurred the displeasure of the gang, were forced to take up arms to defend themselves. They were attacked by the smugglers in force, but defeated them in an engagement with serious casualties of killed and wounded on both sides.[7]

Many of the gang were outlaws and already liable to the most severe punishments, so that the fear of the law was not likely to

[1] 6 Geo. I. c. 21, ss. 40, 41.
[2] 6 Geo. I. c. 21, s. 42.
[3] 9 Geo. I. c. 21.
[4] 4 Geo. II. c. 15; 5 Geo. II. c. 9.
[5] 12 Geo. II. c. 30.
[6] *Norris Papers*, p. 100.
[7] Shore, p. 26.

deter them from any crime. Their most famous escapade was an attack on the custom house at Poole to recover some goods seized from them by the customs. They got safely away. Some months afterwards two Government agents suspected of carrying official letters relating to the smugglers were captured by them, tortured, mutilated and murdered in the most savage and atrocious manner. Eventually the crime was fastened on the Hawkhurst gang, the leaders were apprehended after a space of several years, tried and paid with their lives in 1749.[1]

Shore reprints a letter from a "Gentleman of Chichester." "The terrible executions committed by the smugglers on these poor men and the dreadful menaces which they uttered against any person that should presume to interrupt them, so terrified the people everywhere that scarce anybody dared look at them as they passed in large bodies in open daylight. The customs officers were so intimidated that hardly any of them had the courage to go on duty. . . . The smugglers rode in troops to fetch their goods and carried them off in triumph by daylight. They were not afraid of regular troops that were sent into the country. . . . If one of them happened to be taken and the proof ever so clear against him, no magistrate in the country durst commit him to gaol; if he did he was sure to have his house and barns set on fire, or some other mischief done him if he was so happy as to escape with his life." [2]

These statements are borne out by evidence given before the "Committee on Frauds in the Revenue." Reporting to the House of Commons in 1733 they said: "The smugglers have grown to such a degree of insolence as to carry on their wicked practices by force and violence. Not only in the country and remote parts of the kingdom, but even in the city of London itself, going about in gangs armed with swords, pistols and other weapons, even to the number of forty or fifty, by which means they have been too strong not only for the officers of the revenue, but for the civil magistrates themselves, who have not been able to put a stop to their pernicious practices, even by the assistance of such regulars who have been sent to them and dispersed along the coast at the request of the Government. . . . The number of customs house officers who have been abused and wounded since Christmas 1723 (ten years) being not less than two hundred and fifty, beside six others murdered in the execution of their duty." [3]

[1] Shore, p. 29, *et. seq.* [2] *Ibid.*, p. 42.
[3] *Parliamentary Reports*, I. 605.

But it was not always necessary for the smugglers to intimidate the customs men. They frequently had their own agents among the officers who warned them of intended seizures and raids, and sometimes assisted them to dispose of their contraband. The better organised groups of smugglers retained their own lawyers, who made it their duty to search the records daily to see if any warrants had been taken out against their clients. Even these spies were frequently unnecessary, for the smugglers were sure of friendly warnings from any who might chance to know of the activities of the customs officers. Before the committee on smuggling in 1745, one of the witnesses admits having warned a smuggler that the officers were in search of him, and regards it as a simple act of kindness that anyone would do. Only when the smugglers went to the lengths adopted by the Hawkhurst gang did they alienate public sympathy, and even this gang received the information that led them to capture the unfortunate customs officers, from the landlady of an inn at which they had stopped for a drink.[1]

Furthermore, when captured the smugglers were frequently able to bring pressure to bear on someone in authority to have the prosecution dropped. The committee reported that "... when prosecutions are commenced against any Person, Stops are frequently put to the proceedings upon Applications made to the Lords of the Treasury and the Commissioners of the Customs and Excise, and that Persons of the best Interest, Voters in Elections for Members of Parliament, are always favoured." [2]

In the meantime the Government continued its efforts to check smuggling by preventing tobacco being shipped in small boats, landed at outlying harbours from larger ones or transhipped at sea. The laws relating to the shipment of tobacco by water have already been outlined. In 1733 the Government had a number of boats stationed at various places from Gravesend to Rye to keep a watchful eye on the shipping. At Gravesend ships were boarded by tide-surveyors to inspect the loading of the ship and to seize any loose tobacco, and all the way up the river were officers stationed to watch the shipping and to board the boats as they came in.[3]

By the latter half of the century the smugglers on the sea had resorted to larger ships heavily manned and armed, with as

[1] *Commons Journals*, XXV. 101–106. The reports of this committee and that of 1733 read like a Sabatini novel.

[2] *Commons Journals*, XXV. 105.

[3] *Parliamentary Reports*, I, 603.

many as a hundred in the crew and twenty-four guns, strong enough to beat off and even to sink a revenue cutter. They not only carried contraband themselves but were able to convoy smaller vessels doing the same. The landings of cargoes were attended by such large forces of men that the revenue officers were frequently forced to be "quiet spectators of the proceedings."[1]

In the northern counties smuggling had, if anything, increased. Before the Union the restrictions on trade between England and Scotland had checked smuggling between them. When the Union was projected the Scottish merchants, who enjoyed a lower rate of duty than the English, imported large quantities of tobacco which they sent into England after it had been consummated. This annoyed the English trader for a time but did not last. But it was much easier to land tobacco in Scotland without paying duty than it was to do so in England, and the removal of the trade restrictions between the two countries greatly increased the amount of smuggling. In a petition the merchants of Whitehaven complained that the running trade had greatly increased. "... It is now carried on with such variety of methods and with such success ... traders in Whitehaven and all fair traders everywhere are deprived of the inland trade of Great Britain, and the same is (almost wholly) now in the hands of the clandestine traders, who ... have stripped Whitehaven of the trade." Glasgow merchants sell for low prices even in London and Bristol, and frequently at less than the duties.[2] Before this, in 1722, it was shown in the House of Commons that tobacco was being sold at $5\frac{1}{2}d.$ a pound, which was a penny under the duties,[3] and in 1783 the committee on illicit practices in the revenue reported that smuggled tobacco could be bought throughout the country-side at one-half, and in London at two-thirds, of the lowest price at which legally imported goods could be sold. "It is the opinion of the Commissioners of the Excise, from which we cannot dissent, that the excise duties alone would, if smuggling could be prevented, increase the revenue three times."[4]

One great source of smuggled tobacco was the Isle of Man, which was not under the British customs, but had a customs system of its own. Tobacco, on importation to the island, paid the lord, the Duke of Atholl, one half-penny a pound duty, and

[1] *Parliamentary Reports*, 1783, XI. 228.
[2] *Case of the Merchants in Whitehaven.*
[3] *Commons Journals*, XX. 104.
[4] *Parliamentary Reports*, 1783, XI. 228.

there was no restriction on exports from the island. It was estimated in 1760 that the loss to the revenue due to smuggling from this island amounted to £500,000 a year, and it was known that tobacco was a major commodity in the illicit trade. The goods were ferried to the English coast in smaller sailing boats, and an observer writes: "Ten or twelve of these boats are almost every week seen in a fleet passing Whitehaven, all laden steering for said river (Solway Firth), where they land their cargoes at midday, the country people being ready to assist them in such large numbers that no officer dare offer to molest." [1] Tobacco was also run from the Isle of Man to the west coast of Scotland, Wales, Cheshire, Lancashire and Ireland. In the end, all other measures having failed, it was decided to purchase the sovereignty of the island, which was done in 1765 at a cost of £70,000.[2]

It would be possible to go into the history of smuggling in the eighteenth century at much greater length, and it would, if well written, make an exciting story, but it has already been told by Shore, Atton Teignmouth and others. It will suffice to conclude this history with some reference to the legislation directed against smuggling.

The chief methods adopted by the legislators in their efforts to stop smuggling consisted in a close supervision of the tobacco trade on land, restrictions on the size and type of vessels that might be used in the coastwise and overseas trade, a limitation in the granting of drawbacks, and greatly increased penalties for violations of the law.

No tobacco was allowed to be transported either by land or coastwise except in daylight or in quantities less than twenty-four pounds. Quantities greater than twenty-four pounds could be carried in daylight only when a certificate had been granted by the customs, which certificate had to be carried with the tobacco.[3] In 1783 the quantity of tobacco which could be carried without a certificate was reduced to fourteen pounds.[4] All ships bringing in tobacco were required to carry a manifest from the customs officer at the port of lading, if a British colonial port; or a sworn statement of the ship's lading, by the master, if from a foreign port.[5] Goods liable to duty and not entered in the manifest were to be seized by the customs officers.[6] No

[1] *Accounts and Papers*, 1898, LXXXV. 183.
[2] *Ibid.* [3] 24 Geo. II. c. 41; 26 Geo. II. c. 13; 5 Geo. III. c. 43.
[4] 23 Geo. III. c. 11. [5] 24 Geo. II. c. 41.
[6] 5 Geo. III. c. 43; 25 Geo. III. c. 81.

tobacco was to be imported except in casks of not less than 450 pounds weight, snuff in casks of not less than 350 pounds. Manufactured tobacco could only be exported in casks of 425 pounds at least.[1] This last was intended to make relanding more difficult.

A number of laws regulated the shipping. Except in the trade to Ireland no tobacco was to be shipped in vessels of less than seventy tons.[2] No person was to have in his possession boats that could be rowed with more than four oars,[3] and certain other types of vessels suitable for smuggling were made illegal. No vessel, for example, was to have a bowsprit exceeding two-thirds of the vessel in length. Any of these illegal types of vessels were to be seized by customs officers on sight.[4] Vessels were not to hover near the coast. Suspicious ships were to be boarded by officers.[5] Ships used in the contraband trade were to be confiscated except when it could be proved that the master had so employed the ship without the knowledge of the owner and against his wishes.[6]

In 1765 it had been discovered that much tobacco shipped from England to the Danish islands of Faro or Ferra was being relanded in England, and an Act was passed prohibiting the payment of drawback on tobacco shipped to those islands.[7] By the same Act the penalties for relanding tobacco on which drawback had been paid were increased. In 1785 it was provided that in no case was drawback to be paid on snuff.[8]

The penalties for obstructing an officer in the performance of his duty were increased, and it was further enacted: "Any person who shall maliciously shoot at any ship of the navy or shoot at or dangerously wound any officer of the navy or customs or excise when in the execution of his duty shall suffer death as a felon."[9] Persons going "disguised or armed" were liable to arrest and imprisonment.[10] Officers were ordered to prosecute all offenders arrested by them and committed by a justice of the peace.[11] Officers guilty of collusion with smugglers were to lose their positions and were liable to imprisonment.[12]

This policy of minute regulation of the tobacco trade did not stop with these Acts, which are very complicated and exacting, and of which we have but skimmed the surface in the excerpts which have been given. The crowning act of the legislature in

[1] 22 Geo. III. c. 21; 25 Geo. III. c. 81.
[2] 24 Geo. II. c. 41.
[3] 19 Geo. III. c. 69.
[4] 24 Geo. III. c. 47, s. 2; 27 Geo. III. c. 32.
[5] 24 Geo. III. c. 47, s. 2.
[6] 21 Geo. III. c. 39.
[7] 5 Geo. III. c. 43.
[8] 25 Geo. III. c. 69.
[9] 24 Geo. III. c. 47, s. 2.
[10] 26 Geo. III. c. 80.
[11] 19 Geo. III. c. 69.
[12] 5 Geo. III. c. 43.

the regulation of trade was the excise survey, which was put into operation at the end of the century.

In 1733 Walpole proposed to extend the excise survey to tobacco, and presented a Bill to Parliament with that end in view, but it aroused such a storm of opposition that he was forced to withdraw it. Fifty years later, all other methods of suppressing smuggling having failed, Walpole's proposal was revived, and in 1789 the system of permit and survey was applied to tobacco. The effort of the excise was to discover smuggled tobacco rather than to prevent it being smuggled, and to this end the whole process of manufacture and transportation of tobacco was supervised. Excise officers had to be kept informed by manufacturers and merchants of the least operation of manufacture or the transportation of the smallest quantities of tobacco.[1]

As a practical measure for the regulation of the trade the service was of questionable utility; it only served to harass the law-abiding. There were many places, such as public-houses and small shops, where tobacco was retailed in small quantities and where no accurate check could be kept of sales, and these provided an adequate and safe market for the smuggler. As a deterrent to smuggling the excise proved a failure and was discontinued by the Act of 1840.[2]

The first half of the nineteenth century is sometimes called the "scientific" period of smuggling. Methods employed by the smugglers became more and more ingenious as the customs officers became more careful in the execution of the duty. Instances are given of the use of false bulkheads and linings in ships, hollow stones in the ballast and tobacco made up to look like potatoes or rope. At Flushing the concealment of tobacco in undutiable articles became a prosperous trade. Tobacco continued to be run in the original American hogshead, although in diminishing quantities, this branch of the trade being inherited by the fishing fleets. One or two smacks could load with tobacco at the Channel Islands, Belgium or Holland and return to port with the fleet, and, as long as they did not overreach themselves in the quantities they brought in, it was difficult for the customs force to capture them red-handed, but generally greed proved their undoing.

With the gradual reorganisation of the customs service in the first half of the nineteenth century and the improvement in its personnel, the smuggling of tobacco in quantities was rendered so difficult and risky as to be unprofitable. The smuggling of

[1] *Accounts and Papers*, 1834, XXIV. 237. [2] 3 and 4 *Vict.* c. 18.

tobacco since that time has been limited to the crews of vessels in port who carry small quantities ashore, and to the fishing fleets who are occasionally able to buy tobacco from foreign vessels visiting them.[1]

Yale University. ALFRED RIVE

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[1] Rive, pp. 70–71.

THE EARLY HISTORY OF REGISTRY OFFICES

The Beginnings of Advertisement

I. *The Seventeenth Century*

Articles have appeared in the Journal describing a number of seventeenth-century schemes which aimed, among other things, at bringing together workers and employers. These are a patent of 1637 granted to a Captain Innes, acquired by Oliver Williams, on the strength of which the latter in 1657 issued a *caveat* against a projected *Office of Publick Advice* [1]; the *Office of Addresses and Encounters* proposed by Henry Robinson in 1650 in imitation of an unacknowledged French original, and the proposal in 1660 [2] for a Poor Man's Office by a Quaker, one Lawson.[3]

There are at least four other similar schemes, all interesting. They are signs of the developments which were taking place in commerce, communications and industry, hampered but not checked by the troubles of the times. In some of them the employment agency idea is subordinate, in one (the first) possibly absent, and perhaps their chief interest is that they introduced to this country the practice of advertising.[4] The earliest dates from 1611, before the French scheme of Renaudot, when a patent was granted to Sir Arthur Gorges and Sir Walter Cope for a *Register for generall Commerce* in England and the dominions for twenty-one years with a rent to the Crown of £40. The patentees were to have power to erect an office or offices for the borrowing and lending of money, and the selling or exchanging of lands, tenements, leases, goods and chattels. They were to keep registers for recording the wants of buyers and sellers, lenders and borrowers; there was, of course, to be a fee for entries and searches, but no one was to be compelled to search, and no one was to pay more for such search than should please himself: in guarding against the abuses which made "the Projector and the Patentee"

[1] Sir William Beveridge, Economic Journal, September and December, 1914.

[2] P. S. Belasco, *Ibid.*, History Supplement, May 1927.

[3] F. A. Norman and L. G. Lee, *Ibid.*, History Supplement, Jan. 1928.

[4] See J. B. Williams, *A History of English Journalism to the Foundation of the Gazette*, 1908, to whose references I am much indebted.

a byword of iniquity, the grantees appear to have tied themselves down to hopeless conditions. The passage in Montaigne's Essays, the acknowledged origin of the French scheme, was probably the inspiration of this one. Gorges, a man of letters who had translated Bacon's Essays into French, must have been familiar with Montaigne. But he writes, "this project hath meerly and solely proceeded from mine own poore conceit and labour (ayming specially at the advancement of mutuall commerce, the bond and sinewes of humane society)." He compares his scheme with a public market. There were to be provincial offices as well as the one in London, but he writes, "this publique register shall not be made so vulgar as to be kept in everie chiefe Citie or Shiere." By the registration of money in local branches it was thought that the trouble and risk of the actual transport of coin might be avoided, but it was made clear that there was to be no deposit of either money or goods at the offices.[1] In 1612 there was a second edition of the explanatory pamphlet defending the scheme from attacks and misconceptions. Secrecy would be observed (it is not clearly explained how). "No hidden mysterie and policie of State" lurked in the Register. At this time the office was at "the newe bricke building next within the Middle Temple Gate," but a loose slip is attached to the tract saying that it was to be moved to Britain's Burse (in the Strand).[2] No more appears to have been heard of this scheme and its speedy collapse seems probable. There was a clause in the patent for its surrender before Michaelmas 1612 if it should not prove profitable.

Since Renaudot's scheme was first put forward in 1612 it is possible that the idea was taken from that of Gorges. At all events it is hardly likely that the two schemes were entirely independent of each other. In 1637 a patent was issued to Captain Innes, but this was said in 1657 to have never been put in execution.[3] In 1648 Samuel Hartlib, Milton's friend, applied to Parliament for an Ordinance to establish an *Office of Addresse for Accommodations*, which like Robinson's scheme was probably an imitation, though a less exact one, of the French *Bureau d'Adresse et de Rencontre*. His pamphlet [4] opens with the famous passage from Montaigne, and was, he says, "another Memoriall

[1] *A true Transcript of his Majesty's Letters Patent for an Office to be erected and called the Publicke Register for Generall Commerce . . . to Sir Arthur Gorges and Sir Walter Cope*, 1611.

[2] *Idem*, 2nd ed., 1612.

[3] See below, p. 575.

[4] *A further Discoverie of the Office of Publicke Addresse for Accommodations . . . .* 1648.

on behalf of Master Hartlib and his negotiations for the generall good of the Kingdom," for an office " whereby ready helps will be offered to supply the wants of every one, without prejudice to any. . . ." And it may be added, with considerable profit to the projector. His petition is for an Ordinance " That Samuel Hartlib Esq. may be appointed Superintendent Generall of all Offices of Addresse instituted in the Kingdom of England and Dominion of Wales, with a prohibition to all others to intermeddle in the business, without permission and deputation from the said Samuel Hartlib." For this he asks for a salary of £200 a year and " a convenient great house," with an allowance for the furniture. He also asks for power to demand a fee of 2*d*. or 3*d*. for each entry and extract. There was to be a penalty in the proposed Ordinance for all those who " having entered their demands and received satisfaction for them " should not " clear and discharge " the registers within twenty-four hours unless this should be impossible. This pamphlet prints Hartlib's second application to Parliament, the first having been set aside in the confusion arising from the renewal of war in June 1648. It describes the proposed business of the office in rather general terms : it is for the increase of trade and commerce, for the benefit of the poor, to give them information about employment and charities ; in short it is for the advancement of " all spirituall concernements, the Glory of God and the Happinesse of this Nation. . . ." " The main and principall thing whereat in this office we doe aim at and which we intend, if God enable us to prosecute, is the work of communication for all spirituall and intellectuall advantages, towards the Advancement of Pietie, Vertue and Learning, in all things Divine and Humane, as they are subordinate unto the Glory of God, for whose sake alone we exert ourselves upon these endeavours, and from whom we shall expect our encouragements." The scheme appears to have lacked the parliamentary encouragement for which its projector was also anxious, and it apparently did not materialise.

In the following year Henry Walker, ironmonger and preacher, seditious libeller on the eve of the Civil War and journalist during it, announced, " There is an Office of Entries to be erected on Munday next, for great profit and ease of the Citys of London and Westminster and parts adjacent, as it is in France and other parts where people find great benefit from it." [1] The fee for entries and searches would be fourpence. This is the point at which the scheme inspired by Montaigne comes into relation with the new

[1] *Perfect Occurrences . . .*, Aug. 10–17, 1649.

development of advertisements in the weekly Press. The first advertisement in any English newspaper is said to have been an isolated notice of a book in 1626,[1] but it was not followed up and it remained for Walker to establish the practice. In 1647 he had recommended a book, in *Perfect Occurrences*, in terms which may or may not have been paid for. From August 1649 he advertised his *Office of Entries* (or *of Enterance*), and from 1649 advertisements in news-books quickly became common. His description of the scope of his office concludes: "In sum, whatsoever is made known to the publique by the expensive way of bills posted, or otherwise, may be speedily known for the said fourpence only, and no more charges." Walker's advertisements are interesting in themselves and as pioneer efforts. He not only published the "Entries this week at the Office of Enterance," for instance, "Many that desire to be entertained into gentlemen's services. Those that are well-affected and desire parochiall charges," but also announced, apparently to advertise his office, a lecture in Hebrew to be given "at the said Fountain, which is a private house. It is read in the Great Hall under the Enterance Office, it is free and taught gratis for a generall and public good." Walker's news-book soon came to an end and no more is heard of the Office of Entries.

In April 1650, a few months before Henry Robinson announced his scheme, one Adolphus Speed published a prospectus for *General Accommodations by Addresse*. Although earlier schemes had aimed at universality, more or less, this project is even more extensive. It anticipates not only the Stock Exchange but the company promoter. The usual categories are included, and offers are also made to track down any "debtors that skulk and are latent in any part of England, Ireland, &c.," and to serve as an agent or collector of "the common intelligence of publique state of affairs." Suits in law will be conducted for clients, and: "whoever shall desire to increase the talent Divine Justice hath put into his hands and will deposite monies upon present annuities or for estates in reversion," shall have his wants supplied.[2]

Speed's pamphlet also advertises as if they were the going concerns which one feels sure they were not: "*For young Gentlemen*," a kind of boarding school with an elaborate curriculum; "*For young Ladies*," a similar establishment which in some ways

[1] Of *Epithalamium Gallobrittanicum* in *Mercurius Britannicus*, No. 6, Feb. 1, 1625/6. *Times, Printing Supplement*, Sept. 10, 1912.

[2] *General Accommodations by Addresse*, 26 Ap., 1650. (Name and address of the author in MS.)

suggests a scheme of Defoe's; "*For ancient Widows and Maids,*" apparently a kind of *béguinage*. All these establishments are described as perfect paradises each in its large house and grounds. This is not all. Under the heading *Discoveries* he advertises projects, financial, commercial and industrial, which vie with the more speculative proposals of the South Sea Bubble frenzy. These include: "*Imprimis*, to discover a certaintie to raise 2000 li. *per Ann. de claro*, with lesse then 200 li. stock unhazarded, and beyond contradiction, without the least aspersion of usury, extortion, oppression, engrossing, or any unconscionable monopolizing or dishonourable way whatsoever. This design may be advanced to a farre greater proportion, and exceedingly to the good of the Publicke." "*Item.* A late experiment to make tin here in London, or in the country at 20 for 5. benefit and to make steele, brasse and copper with very great profit, and to make iron of pit-coale and sea-coale." "*Item.* To discover a Mine of Coles very considerably convenient for sale, not known to any but myself, the Ingeneere whom I imployed therein being lately dead, whereby might be raised (all charges borne) at least a thousand pounds *per annum.*"

Speed, unlike most of his fellow-projectors, appears to be unknown to history except that he published a tract on agriculture in 1659. His alluring prospectus was shortly followed by Henry Robinson's less original production. In 1657 appeared the prospectus of an *Office of Publick Advice* which called forth Williams' protest that it was an infringement of his rights as the holder of Innes' patent. To the account of the controversy given by Messrs. Norman and Lee something may be added. The projector of the Office was no less a person than Marchamont Nedham, famous or notorious for his varied journalistic enterprises during the Civil War and Interregnum. The times were evidently ripe for an advertising enterprise, because when the severe Press restrictions of 1655 suppressed all news-books but those of Nedham which were corrected by Thurloe, he raised his fee for advertisements from sixpence to half-a-crown.[1] Oliver Williams, besides being a speculator in dormant patents, was (in 1659–60) a journalist whose activities brought him for a few months into the central stream of English history at a critical period.

Nedham's original contribution to the scheme was that of the news-book entirely devoted to advertisements. His clients were to have their wants advertised for four successive weeks (or longer if the fee were renewed), and his prospectus opens with a manifesto

[1] J. B. Williams, *op. cit.*

on the uses of advertisement : " Because the life of all Intercourse is quickness of Return and the same can hardly be had, except the things, about which the said Intercourse is practised, come to the knowledge of men concerned therein, which hath been, in a manner, altogether wanting." " More chapmen will be found for the same than if they should onely take such blinde ways of addresses heretofore made use of. . . ." By this new method, he says, fees are paid by one party only, whereas " in the way formerly used by others, both parties are to pay the fees, and few if any come to be effectually served in what they aimed at."

The organ of the *Office of Publick Advice* issued by Nedham was *The Publick Adviser weekly communicating unto the whole Nation the several Occasions of all Persons that are any way concerned in matter of buying and selling or in any kind of employment or dealings whatsoever ; according to the intent of the* Office of Publick Advice *newly set up in several places in and about London and Westminster.* This began in May and ran for four months. Williams retorted with *The Information from the Office of Publick Intelligence established in and about the Cities of London and Westminster by Authority granted under the Great Seal of England. . . .* Its life was short. One number only seems to have appeared. The situation seems to have been that if Nedham's Office was barred by Williams' grant (which is doubtful), Williams' news-book was barred by Nedham's Press monopoly. Nedham continued for four months to advertise his Office, and took advantage of his privileged position to attack Williams : " Now whereas one Williams, pretending a patent from the late King which hath lain dormant above twenty years and was never put in practice, contrary to the law hath lately endeavoured to disturb the said Offices of Publick Advice, and by a combination with some others hath given out his intent to erect several offices after the same model, merely to hinder the good which the commonwealth is likely to reap by the said offices ; These are to give notice that the present Offices of Publick Advice are created upon a justifiable ground of authority according to law ; as he and others shall finde whensoever he begins to put his disturbing design into practice." [1]

The advertisements in the *Publick Adviser* are very interesting. They are chiefly commercial and financial, and in the early numbers shipping news, shipping insurances, etc. are most prominent, and show that the Office, in design at all events, was an anticipation of Lloyd's. The growing popularity of the coffee-house, however, obstructed developments in that direction.

[1] *Publick Adviser*, July 13/20, 1657.

The labour exchange function, either in intention or for want of custom, is secondary. For instance, this notice appears more than once as the only example of "places wanted": "Any gentleman whatsoever that wants a tractable young man about eighteen years of age to wait on him in his chamber, who never was yet in service, or to employ him otherwise as he shall think fit; let them repair to the Office of Publick Advice in the White-Friers [no very reputable address], where they may be satisfied of the party." There are, however, some interesting notices of masters and mistresses who want apprentices. In the prospectus in May eight branches of the Office were announced, but in the last two issues of the *Publick Adviser* these have dwindled to three. It is to be presumed the Office and the news-book came to an end with the last issue of the latter in September 1657.[1] Trade was very bad and the times were not favourable to business enterprise of any kind.

Oliver Williams, in his one issue of *Weekly Information from the Office of Intelligence* (July 13/20, 1657), gives a list of six branches and their office hours, and claims that his undertaking is managed "according to the best experience gained from foreign parts, where the said office in many places hath been of long standing in great request and esteem. . . ." He admitted two years later, however, that his scheme had never been put in practice, which confirms one's suspicions that a prospectus, even with a list of offices and office-hours, by no means connotes actual business.

Williams got his chance when the Press restrictions came to an end in the confusion which followed the fall of Richard Cromwell in 1659. He issued a bi-weekly news-book (or two overlapping weekly books) with alternative titles according to the journalistic practice of the time. One was called *A particular Advice from the Office of Intelligence near the Old Exchange in Cornhill, and also Weekly Occurrences from Forraigne Parts.* The other had the same title or catch-word reversed, though according to a confusing custom the catch-word tended to vary. In the first issue the "courteous reader" is desired "to take notice that the *Office of Intelligence* having been long since settled and established by letters patents . . . the persons interessed in the said Office, humbly conceiving the same to have been established and continued on very good grounds and considerations and that the good ends and purposes have been hitherto lost for want of putting

[1] As numbers 1 to 17 are all in the Thomason Collection it is to be presumed that no more were issued.

the same in due executions, the said persons are now resolved (God permitting) to revive the said Office. . . ." The news-book, at first concerned primarily with advertisements of the Office, became more and more political, and added home news to the "Forraigne Occurrences." Williams, in the beginning of 1660, made his paper serve the interests of the Republican party in the Rump, and when the Restoration became imminent and Nedham fled from the country, he and another journalist, Canne, appropriated his old rival's catch-words of *Mercurius Politicus* and the *Publick Intelligencer*, thus issuing from his *Office of Intelligence* four weekly (or two bi-weekly) news-books which he marked "by authority." This "authority" was nothing less than Innes' old patent on the strength of which he claimed the sole right of publishing news-books. He was rash enough to enter upon a controversy with Muddiman, who during the critical first weeks of 1660 had run his news-books in the interests of Monk and (covertly) of the Restoration. In this he was naturally worsted: his record was republican and his claim to a journalistic monopoly was monstrous. Muddiman effectively answered it: "As to the writing of a *Gazet*, I confess I have never yet seen his power, but because the gentleman in some of his former papers hath told me I knew it, I'le tell him my opinion of it, that he may have power to keep a shop or stall, to give information of money to be laid out in Bomaria [bottomry bonds] or where a man may with most security venture to have his corns cut, where the Rat-catcher lives, or what house is to be let on the Bank-side, where young men and maidens may hire maid-servants, and what bargains are to be made there. But how this entitles him to Press work, I leave it to himself to make out."[1] At this point the Privy Council intervened and suppressed all news-books but Muddiman's.[2]

After the Restoration the word Intelligence Office used by Williams became established in the language as a place where advertising sheets were issued and where information of a commercial sort was to obtained.[3] Advertising papers seem to have waxed and waned according to the freedom of the Press and the

[1] *Parliamentary Intelligencer*, June 25/July 2, 1660.

[2] J. B. Williams, *Op. cit.*, and *Newsbooks . . . of the Restoration*, *English Historical Review*, April, 1908.

[3] Cf. Etherege, *The Man of Mode*, 1676, iii. 2:

"*Emilia.* You are a living libel, a breathing lampoon, I wonder you are not torn in pieces.

"*Medley.* What think you of setting up an Office of Intelligence for these matters? The project may get money."

policy of newspapers with regard to advertisements. When the *Gazette*, having become the only newspaper, announced its intention of not admitting advertisements as "not properly the business of a paper of intelligence,"[1] it also announced a forthcoming paper of advertisements. But L'Estrange's patent as Surveyor of the Press obstructed this and he himself issued such a paper, *Publick Advertisements*, which was an instant failure. Its one issue (26th June, 1666) was chiefly devoted to medicines and books. From the infancy of advertising, medicines and quack remedies have been conspicuous among advertisements.

There were two interesting and well-known experiments in specialised advertising. *Mercurius Librarius* (1666–8), a quarterly list of books published, a printer's venture, the fee for each entry being a shilling, soon imitated and superseded by *A Catalogue of Books*, the joint enterprise of the London booksellers, which afterwards changed its title to the better known *Term Catalogues*. The other is *Lloyd's News*, which came out thrice weekly from September 1696 to February 1697, to be revived in 1726 as *Lloyd's List*. This did more effectively what the *Publick Adviser* had attempted to do for shipping in 1657. As one of these was the organ of Stationers' Hall and the other of Lloyd's Coffee House, so the sheets of miscellaneous advertisement styled *Mercury* or *City Mercury* came from Intelligence Offices. The first *City Mercury* (Nov. 4, 1675) announces that "the office or place where every person may have his desires answered in anything hereby advertised, is kept in St. Michael's Alley in Cornhil, London, right against Williams' Coffee House, where constant attendance every day in the week shall be given from nine in the morning to five in the evening, to receive the desires of all persons of this nature carefully to answer the same." Later Mercuries come from "the old office at the North West Corner of the Old Exchange" (possibly that of Oliver Williams), and from "the Mercury Office at Charing Cross."

When the Press became free in 1695 the general advertising sheet seems temporarily to have gone under with the multiplication of newspapers and the large amount of space which they devoted to advertisements. "Intelligence Offices, however, survived as employment agencies of a disreputable kind, their reputation being entirely in accord with the implied insults in Muddiman's attack on Williams, quoted above. At the end of the seventeenth century offices of this kind were said to be places where the unwary or the down and out were induced to go as indentured

[1] *Gazette*, 14th June, 1666. Advertisements were, however, soon admitted.

servants to the Plantations. Ned Ward describes such a place in 1699, "an Office where servants for the Plantations bind themselves to be miserable as long as they live." [1] An undated *Mercury* [2] "from the Mercury Office at Charing Cross" makes the suspect announcement that "any merchants that have occasion for servants to go beyond sea may there be accommodated." The servants were procured by kidnapping or blandishments by "fine fellows" who "walk the 'Change" and "look like footmen upon a holiday crept into cast suits of their masters." From the ambitious schemes of Gorges, Renaudot, Hartlib and the others had developed a swarm of competitive offices of very doubtful value to the public whom they professed to serve.

II. *The Eighteenth Century*

"*The happiness and prosperity of society depends in a great measure on each of its members being employed in a station suited to his capacity and his abilities: This material point is, at present, left in a great degree to accident, which performs it in a blind and imperfect manner.*" Dr. John Hill on *The Universal Register Office* in the *London Daily Advertiser*, Oct. 31, 1751.

After the Restoration the ambitious schemes for bringing all who had goods and services to offer into touch with those who might need them petered out into small advertising concerns or employment agencies of a not too reputable kind. In the middle of the eighteenth century the aims of the early projectors were renewed in a remarkable way by a most interesting attempt to realise the aims and ideals of the modern labour exchange and something more. It was known as the Universal Register Office, and its founders and proprietors were "Messrs. Fielding and Co.," that is, Henry Fielding and his brother John, the principal partners in a "society of gentlemen" for an undertaking begun with high hopes that it would prove a panacea for social evils and realise considerable profits for its owners. The only other partner whose name can be discovered is Saunders Welsh, Fielding's friend, and also (having been appointed on Fielding's recommendation) a notable London magistrate. The Universal Register Office has thus the distinction not only of association with Fielding, but also of belonging to three persons who were all deeply concerned in the attempt to lessen the crimes and disorders of London.

The enterprise is of interest independently of the fame of its

[1] *The London Spy.*

[2] In Volume 99 of the Burney Collection, which contains a number of miscellaneous newspapers of dates between 1677 and 1697.

founders. Its aims, its measure of success and its ultimate failure throw light on the conditions of the time. The difficulties it encountered led two of its proprietors to interesting conclusions: one, that such an undertaking could only be successful as a Government undertaking. The other, that all employment agencies ought to be licensed and regulated by the Government. These were remarkable opinions in an age when the field of administrative Government action was at its most restricted, in practice if not in theory.

Like the earlier schemes, with which it has striking similarities, it derives from the famous thirty-fourth essay of Montaigne. "If any society ever hath been, or ever can be, so regulated," runs John Fielding's explanatory pamphlet,[1] "that no talent in any of its members which is capable of contributing to the general good should lie idle and unemployed, nor any of the wants of its members which are capable of relief should remain unrelieved, that society might be said to have attained its utmost perfection." Such perfection, the optimistic writer thought, could be attained by a universal clearing house of human resources and human wants which should supplement the various devices of civilisation already existing: "fairs, markets, exchanges, and all other publick meetings for carrying on traffick and commerce. . . ." "In large and populous towns and wide extensive communities it is most probable that every human talent is dispersed somewhere or other among the members, and consequently every person who stands in need of that talent might supply his want if he knew where to find it." The passage from Montaigne is then quoted at length as the principle on which the Universal Register Office was founded.

The Office was opened in February 1749/50. Its method was to keep registers for each branch of the business in which were entered detailed descriptions of things to be disposed of and the qualifications and guarantees of applicants for employment. For a shilling or sixpence, according to the category, an entry would be made in the appropriate register; for threepence an inquirer would be told of persons or things on the books, or he could pay the higher registration fee for which he would have his wants entered and be kept informed by post. Office hours were from nine to seven; one of the proprietors always, it was said, attended in person as well as the clerks. Shortly after the opening of the original office in the Strand a City branch was started in Bishopsgate Street, and also a corresponding office in Dublin. Fielding's

[1] *A Plan of the Universal Register Office. . . .* 1752.

exhausting labours at Bow Street, not to speak of authorship and failing health, can hardly have left much time for the business of the Office, and at all times John, Henry's blind half-brother, was the leading spirit in the affair. He wrote the explanatory pamphlet, drafted and signed the advertisements, which were numerous, and defended it in the Press. Until after Fielding's departure for Lisbon in June 1754 he was its "resident proprietor" at the Office in the Strand, to whom clients were requested to address themselves in person. While he gave it this minute personal supervision, in spite of rivals and annoyances the undertaking seems to have been on the whole successful. It figures prominently in Fielding's short and apparently hurried will. By this all his estate was to be sold and converted into money and annuities with the exception of his shares in the Universal Register Office. Of these he left ten to his wife, seven to his daughter Harriet and three to his daughter Sophia. A letter to John written at Ryde on his voyage to Lisbon begins: "Dear Jack, after receiving that agreeable lre.[1] [letter] from Messrs. Fielding and Co., we weighed on Monday morning and sailed from Deal. . . ." Thus, a few days after leaving London, Henry had evidently received a dividend on his twenty shares.

The scope of the Office, though wide, is less so than some of the earlier schemes.[2] Messrs. Fielding and Co. did not run a matri-

[1] When this was first transcribed from the MS. *lre* was copied as £10. (Austin Dobson's introduction to the *Journal of a Voyage to Lisbon* in the World's Classics.) A later commentator has explained it as *Livre*. It is, of course, a common abbreviation for letter.

[2] There is full account of the business of the Office in John Fielding's *Plan*. The following advertisement summarises it:

"To Every Body.

"At the Universal Register Office opposite Cecil Street in the Strand and . . . in Bishopsgate, both by the same Proprietors, Estates and Houses either to be sold or lett in any part of Great Britain. Lodgings to be lett either in Town or Country; Boarders or Boarding Houses, Schools, Academies, Curates, Tutors, Ushers, &c.; perpetual Advowsons, next Presentations, Exchanges of Livings, immediate Resignations and Chaplaincies. Offices either civil or military. Money to be lent on all kinds of Security from 100*l.* to 100,000*l.* Annuities bought and sold, Insurances on Lives, Ships and Merchandizes. Curiosities and Animals of all kinds, &c., &c. Masters in all Arts and Sciences, Journeymen, Apprentices, Clerks, Book-keepers in all Trades and a vast Variety of Servants in all Capacities are registered and to be heard of at this Office, where such as are good never fail meeting with due Encouragements, where likewise Information in all kinds of public Business relating to Persons or Things may be had.

"John Fielding, one of the Proprietors.

"We correspond with an Office built on our Plan in Dublin, but with no other."—*Public Advertiser*, Jan. 11, 1753.

Later advertisements stress chiefly the employment-agency side of the Office, and to a less extent its house-agency business.

monial agency, a charities register or a lost property office. They did not offer to track down criminals or debtors or to trace missing husbands and lost children. Some of these things had become the business of Bow Street. They did not run an emigration bureau—that was a thoroughly disreputable business—but, like the earlier concerns, they did run a travel bureau. Information was supplied concerning "conveniences for travelling in all manners by sea or land, ships, whither bound and when depart, with the terms for passengers. Stage coaches: the inns they put up: the hours and days they depart and arrive at, with their prices. Bye and return coaches for *Bath* and all other places: when expected to arrive and when set out, and their prices. Likewise all methods of conveying goods either by land or water carriage, companions for post-chaises, etc. This article surely needs neither explanation nor recommendation. How advantageous, on the one hand, must it be to captains of ships and masters of stage or bye-coaches, at so trifling a cost as sixpence, to be sure of never missing a passenger; as, on the other hand, how infinitely easy must it be to the public by the trouble of sending to a place, which, as it is in the very centre of the town, cannot be far off, and at a price of threepence, to know every convenience of travelling to the place they are destined to."[1] The Office, in short, anticipated both the travel agency and *Bradshaw*. It was natural that when Henry Fielding decided to go to Lisbon in search of a better climate, John was soon able to tell him "of the excellent accomodation for passengers which were to be found on board a ship that was obliged to sail for Lisbon in three days."[2] And it was perhaps out of consideration for a client and in the interests of Messrs. Fielding and Co. that John[3] deleted from the first edition of the *Journal of a Voyage to Lisbon* those pungent descriptions of the behaviour of Captain Veal on board the *Queen of Portugal*.

Unlike some of the earlier schemes, the Office was not an advertising agency. Indeed in its capacity as an estate agency it was urged as a recommendation that the necessity for advertisement was eliminated. "The two principals or their immediate agents are brought together . . . without the danger and costs of employing jobbers or disparaging the estate by a public advertisement, which, though it costs from four to twenty times as much, lasts but a day; and which, though it exposes a man's circum-

[1] John Fielding, *A Plan of the Universal Register Office*. . . . 1752.

[2] Fielding, *Journal of a Voyage to Lisbon*.

[3] See Austin Dobson's introduction to the *Journal* in the World's Classics edition.

stances to all his neighbours, escapes perhaps the observation of the very person for whom it was designed." [1]

Though John Fielding disparaged advertisement he was himself a master of the art of publicity, and in his anxiety to popularise his darling scheme he carried advertisement to an extreme which, in a sense, has never been equalled. That is, he, or Henry at his instigation, interpolated into *Amelia* a number of half-humorous puffs of the Office. Mrs. Bennet tells the story of her husband's difficulty in finding an exchange for his curacy. "After many fruitless enquiries," she says, "Mr. Bennet was at last informed of an office lately erected, opposite *Cecil-street* in the *Strand*, called the Universal Register, where he was assured he might probably have his choice of above a hundred curacies. . . . To *London* we came, and took up our lodging the first night at the Inn where the stage coach set us down; the next morning my husband went early to the Office, from whence he returned in a kind of rapture, saying, he had been at a place where all the necessities of life were provided for. I have not only heard, said he, of a variety of curacies, but I have equipped myself with a lodging . . . and, what is more, I have a direction from the Office to a person who will advance your legacy at a very reasonable rate." Indeed there were "near fifty gentlemen, whose names were registered in the Office, who transacted business of this kind." Mr. Bennet was afterwards told of a travelling companion, "registered to go within a few miles of the same place," to share the expenses of a post-chaise. Booth too found lodgings through the Office and Amelia was told of a reputable pawnbroker. It was a more doubtful recommendation that knowledge of private matters, for instance, anecdotes about Mrs. Bennet and Miss Matthews, were obtained from one of the clerks, "who by having a general acquaintance with servants is master of all the secrets of every family in the kingdom." No wonder the Office was stigmatised as a "scandal shop." [2] There was also an advertisement of the Office at the end of the second volume of *Amelia*, as there was in the *Reasons for the late Increase of Robbers* published in the same year. Fielding revised *Amelia* carefully for the second edition (published after his death), and besides removing the blemish to his heroine's nose, took out all the allusions to the Universal Register Office.

The main business of the Office was that of an employment

[1] J. Fielding, *A Plan of the Universal Register Office. . . .* 1752.

[2] In a pamphlet ascribed in the *Gentleman's Magazine* of 1752, p. 29, to Smollett.

agency. "The principal intention of these offices," runs an advertisement of 1658, "was to open a channel for employment for the ingenious and industrious, the want of which too often subjected them both, though capable and willing to gain their livelihood, to the greatest distresses." [1] But in this, unlike the schemes of Henry Robinson and the others, the Fieldings aimed at much more than the mere bringing together of masters and servants, employers and employees. They intended to remedy certain definite evils of eighteenth-century London which were their direct concern as magistrates. Much of the crime and disorder of the country, and especially of London, was ascribed to the depravity of servants. The London footmen were a formidable body and servants' riots were not infrequent. There was much dishonesty among servants in general, and the ranks of highwaymen and professional thieves were apt to be recruited from the numbers who were at all times unemployed. Apprentices too who had run away from their masters, or whose masters had run away from them, too often drifted to the underworld.

In the general chorus of dispraise of servants John Fielding did not join. On the contrary, though he apparently accepts as indisputable the general agreement that "there is no place where they labour less, and where they are so little respectful, more wasteful, more negligent, or where they more frequently change their masters," he asserts that the characteristics of English servants are "fidelity, good-nature and integrity." Bad masters, he says, make bad servants: "profligate and extravagant masters corrupt the manners of the best of servants." [2] He puts the blame for an unsatisfactory state of things on the unjust characters given "either from false good-nature or undeserved resentment," and on the custom of discharging servants with a month's notice or a month's wages.[3] It must be remembered that they were easily replaced and that wages were a very small proportion of the payment of the servants of the well-to-do; the greater part came from "vails" or tips. Alan Cunningham tells a story of Reynolds which may or may not be true of him, but was certainly in accordance with the customs of the time. He says that Sir Joshua on engaging a servant told him that his wages would be £5 a year, but that "the door" would be worth £100.

Then the way in which servants were engaged was thoroughly

[1] *Public Advertiser*, Jan. 24, 1758.
[2] J. Fielding, *The Universal Mentor*, 1763, chap. ci.
[3] J. Fielding, *Extracts from the Penal Laws*, new ed., 1768, p. 141.

unsatisfactory. There were "Intelligence Offices" and there were "Statute Halls." The latter were named after the statute fairs or mops held in many parts of the country for the hiring of servants, more especially of farm servants. Speculators advertised "Halls" in the outskirts of London (there was one in Tottenham Court Road and one "near Whitechapel Church" much advertised in the 'sixties) where servants were drawn up in "aisles" and masters or mistresses went to inspect and engage them, a few pence being paid for admission. Both these types of place were enumerated among the frauds of London, comparable with ring-dropping and the other tricks of the confidence-men. "Intelligencers" are described as persons who keep statute halls and offices of intelligence:

> "There is not, in this Metropolis, a more flagrant and barefaced cheat practised than by these fellows, who, in general, are illiterate boobies, not worth a groat, having lived a loose disorderly life, set up this trade in order to impose upon the ignorant country man and maid, by helping them to places of every denomination, of which their existence is only in idea. Many of these intelligencers are downright bullies and bawds, and old procurers. . . . I would therefore advise my country readers not to pay intelligencers for getting them places, who frequently keep people for a month, and put them to daily expences, without the least probability of doing them service, or, should they recommend them, it is to the pimp, bawd or procuress. . . ." [1]

It was also customary for those in want of servants to visit the inns where the country waggons put up (as depicted in the first plate of Hogarth's *Harlot's Progress*) so as to get girls straight from the country. Those who had lost their character in town were said to get some waggoner to give them a short trip out of London and back again so that they might appear to be coming up from the country for the first time. The Universal Register Office set out to remedy this state of things, "to redress the general complaints about servants, which experience convinces us does not so much arise from the want of good servants as from the indiscriminate mixture of good and bad in the same family, and from others being placed in stations they were not qualified for, though their characters in other respects were unexceptionable. . . ." This was to be amended by a strict scrutiny of the qualifications of all applicants, to "prevent servants from

[1] Richard King, *The Frauds of London detected. . . .* n.d., *c.* 1770.

procuring false or counterfeit characters," and to "put it out of the power of masters to give unjust ones to servants. . . ." [1] It is difficult to see how the last was to be achieved. John probably relied on the skill in cross-examination and character-reading for which he was to become famous at Bow Street. It was a principle of the Office (as of modern housewives) that "no written character of a servant, unless confirmed by persons of credit, will have any weight. . . ."

He also aimed at exercising a similar discrimination in the case of masters and apprentices. This was of far greater importance, as the choice of a trade and a master involved the whole future career of the boy, and the frauds, miscarriages and disappointments resulting from apprenticeship were notorious. One of his advertisements will show the intentions of the Office :

> "As the misconducts and inconveniences of apprentices in this town, who are a very numerous body, are generally owing either to the dislike of the trade to which they are bound, to the want of example in the families in which they are placed, or to their being taken, as they too often are, for the sake of the money given with them, this is to give notice, that at the Universal Register Office carried on by Messrs. Fielding and Welsh, masters wanting apprentices, and apprentices masters, are respectively entered, and all parents and guardians are carefully instructed by Mr. Fielding himself in proper choice of trades according to the capacities and circumstances of the boys to be put out, and proper caution given to avoid the inconveniences arising from improper indentures and other causes to which masters and apprentices are now subject. It is therefore to be hoped that no master will make an entry in this Office for an apprentice who does not really want his services, for experience teaches that disorders and confusions in society do not arise so much from want of talents in the individuals of it as from the misapplication of these talents. And as the public good is our object in this advertisement, we doubt not but it will meet with a candid construction and a due confidence in the public's faithful servants,
>
> "J. Fielding, S. Welsh, Proprietors.
>
> "All letters from the country, post-paid, will be duly answered, and proper masters obtained for boys before they are sent into the dangerous temptations of this town." [2]

[1] Advertisement in *Public Advertiser*, Jan. 24, 1758.
[2] *Public Advertiser*, March 26, 1756.

This is probably the first attempt to cope with the problems, now dealt with by juvenile labour exchanges and by associations for selecting industrial careers and preventing blind alley employment, which are sometimes mistakenly supposed to have been satisfactorily solved by the old apprenticeship system. Another advertisement will show the way in which the Office was run to supplement the labours of the two chief London magistrates :

> " To all strangers who come to London to transact business or for employment, and especially servants who come out of the country.
>
> " Whereas it too frequently happens that persons who come from the country to London either to transact some little business, or to be employed in the station of servants or otherwise, become the too easy prey of gamblers and bawds and are ruined before they know where they are, for want of having such friends and acquaintances in town as might inform them or guard them against the numberless artifices practised by the wicked here, to deceive the unwary, and betray the innocent. We therefore earnestly recommend it to such persons to be particularly cautious where they first lodge, and with whom they first become acquainted : And if, as soon as they arrive in London, they would come immediately to the Universal Register Office in the Strand or . . . in Bishopsgate Street, they will find a society of gentlemen who, if they are servants, and can give such an account of themselves as may enable the proprietors of that office to get an undeniable character of them, will place them in some creditable family; or if they have business to transact, will shew them the readiest, safest and cheapest manner of doing it. And as it is much more agreeable in itself, and much more useful to the public to prevent offences than to punish offenders, it is to be hoped that a due attention to this advertisement will in time decrease the number of those unhappy wretches that are daily brought before us when acting as magistrates, as objects of punishment; many, nay most, of whom owe their destruction either to their necessity, from the want of employment, or to the artifices of such whose shameful interest it is to debauch the modest and ensnare the ignorant and unexperienced." [1]

This too was signed by John Fielding and Saunders Welsh. Unfortunately the Office did not continue to prosper. It had

[1] *Public Advertiser*, Oct. 2, 1755, etc.

a long struggle with unscrupulous rivals who imitated its advertisements and brought it into discredit. The chief of these was the Public Register Office, run by a Frenchman who had applied to the Universal Register Office for work as a teacher of languages which had been found for him, and had then hung round the Office, offering his help to the clerks, thus obtaining access to their books. He then disappeared and shortly after opened a rival Office. This is John Fielding's account of Dullwin as he calls him. D'Hallouin, as he calls himself, answered this by abuse of "Mr. Folding" (in retaliation for Dullwin), and by saying that he had done much gratuitous work for the Office but had been refused a partnership in it. This "pretended office," as John Fielding calls it, offered to "register all articles gratis, a delusion which needs no comment." He fears, not its rivalry, but disrepute from a confusion of the two: "'Tis very certain that many offices of this kind, though not so extensive in their business, have been attempted in this kingdom, but have always sunk into disrepute from the meanness of their undertakers; for nothing can render a design of this kind useful but its being one only, and that in the hands of gentlemen of honour and abilities." [1] This controversy with Dullwin was fought out not only in the correspondence columns of the Press and in advertisements and counter-advertisements, but inspired one of the many violent attacks on Henry Fielding. It is believed that the *Drury Lane Journal*, a weekly pamphlet of abuse of Fielding which masqueraded as a newspaper and was written by Bonnell Thornton, was financed by Dullwin in order to damage the Universal Register Office and divert its patrons to the Public Register Office, which was the headquarters of this ephemeral sheet.[2] If this is so it suggests that at this time (1752) considerable profits were expected from the enterprise of Messrs. Fielding and Co.

The Universal Register Officer had to struggle not only with the deliberate attacks of rivals who stole its customers and discredited its methods, but with the general disrepute attaching to Intelligence Offices which were quick to change their name to Register Office, and so to profit by John Fielding's lavish advertising. There were also the inevitable disappointments caused by the clients who gave characters which were far from judicial, and who registered property for sale and then failed to notify the

[1] John Fielding in *London Daily Advertiser*, Nov. 4, 1751.

[2] There were twelve numbers in all between Jan. 16 and April 9, 1752, but there appears to be no copy in the British Museum. It is described in Jensen's *Covent Garden Journal*, 1915, and by Professor Cross in the *History of Henry Fielding*, 1918. The theory that it was financed by Dullwin is Dr. Jensen's.

Office that it had been sold. In 1755 John complains that "since our offices have been opened, various others, in imitation of our Plan, have been erected under the same name, and several of the old Intelligence Offices have changed their name into that of Register Office. Others have been imposed upon by our imitators, who, not being content to pirate our Plan, do also privately assume the name of *Fielding*, and the errors of these offices are frequently charged to our account. By this means several letters that used to come safe to hand . . . have miscarried." [1]

The undertaking in the circumstances of the day, with its fierce and unscrupulous competition, could hardly have succeeded. Nevertheless, it was not till 1761 that John Fielding handed over the business to one of his clerks. In 1764 its new proprietor, Thomas Adams, informed the public that he had been "one of the principal clerks of Henry Fielding, Esq., and the other proprietors," from the foundation of the Office till it was relinquished by them in 1761. He invited gentlemen to inspect his Office and examine his methods. It had suffered from the offences of imitators, and he professed his willingness to adhere to any rules they might lay down, and suggested that "it might be subjected to a licence, or to whatever regulation the legislature may think fit to impose on him and every undertaking (by whatever name distinguished) of the like kind, throughout his Majesty's British dominions, as by this or some such method, that which may be productive of real benefit to society when under due restrictions will not be totally lost on account of the misconduct of a few mercenaries." [2]

John Fielding makes a more drastic proposal. "It is apprehended," he writes, "that if a Register Office founded on the principles and executed by the same methods as that in the Strand, so long carried on by Mr. Fielding and Co., were to be under parliamentary sanction, to have all imitators suppressed, to be executed by Commissioners and the profits arising to go to the Government, it would be a great blessing to mankind . . ." [3] Here is the labour exchange idea full-fledged. Its author had realised the essential incompatibility between a profit-making concern and a scheme of social welfare. When he was appealing for a "candid construction" of his advertisements of the Universal Register Office he was also working for the establishment of the Marine Society and the Orphan Asylum,

[1] *A Plan of the Universal Register Office* . . . 8th ed., 1755.
[2] Advertisement in the *Public Advertiser*, Nov. 8, 1764.
[3] John Fielding, *Extracts from the Penal Laws*. . . . New ed., 1768, p. 141.

which were attacks on social evils from another standpoint. The effect of the establishment of the Universal Register Office was to change the name of an employment agency from an Intelligence Office to a Register Office—later to become Registry Office—and their reputation was not amended. It became a recognised maxim of the later eighteenth century never to take a servant from a Register Office. In a newspaper article on "How to prevent house-breaking from without and bankruptcies from within," one of the rules to be observed is, "Never take a servant into your house who has sat two hours on a bench in a Register Office: If they had any honesty when they went there, they will have found counsellors to teach them to part with it at the first opportunity." [1]

M. DOROTHY GEORGE

[1] *Public Advertiser*, Dec. 16, 1773.

A "TURN-OUT" OF BOLTON MACHINE-MAKERS IN 1831

I

This article has been compiled from a small collection of material recently deposited in the Economics Library of the University of Manchester by Lt.-Col. B. Palin Dobson of Messrs. Dobson and Barlow, Ltd., Textile Engineers, of Bolton. When the firm was founded in 1790 it consisted of a partnership between Isaac Dobson, the youngest son of a Westmorland yeoman family, who had migrated to Bolton in 1789, and Peter Rothwell, who was already engaged in the timber trade of the town. This partnership continued until 1822, when it was changed into a partnership between the said Isaac and his nephew Benjamin Dobson, which lasted until the death of the former in 1833. The material relates to a "turn-out" of the employees of the firm which extended from June 1831 to the end of the year, and maybe beyond that time. The objects of the "turn-out" are indicated in the following notice which bears the names of 134 workmen:

> Gentlemen,
>
> We, your workmen wish to inform you that we Request a Reduction of our time to work for the future as follows viz. from Six O'Clock in the Morning to Six O'Clock at Night allowing half an hour for Breakfast and one hour for Dinner and half an hour for Tea and to leave work on Saturdays at four O'Clock Respecting lads that the(y) be Reduced in proportion to the Men allowing one Lad to four men and the lads to serve five years before Twenty one years of age and that by Legal Indenture
>
> May 21st. 1831.
>
> We your workmen wish you to un(der)stand that We are giving you a fortnight notice from the Date hereof—for the above mentioned times,
>
> We Remain Yours Respectfully
>
> Your Servants.

The immediate objects of the "turn-out" were, therefore, a reduction in the length of the working day and some control over the supply of labour. Upon these objects and also upon the "turn-out" in its wider aspects, some light is thrown by some of the documents that have been preserved. The first is in the form of an address to his "Friends and Fellow-Workmen" by a man named John Hammond, which is so informative that it is worthy of quotation at considerable length:

"As a dispute is now pending between us and our employers, concerning the machine-making mechanics, working one hour per day more than other mechanical trades, it may not be amiss to state some of the causes of this encroachment; it is an abuse of long standing, it came by imperceptible gradations, so the workmen of the present day are not blameable for suffering it to infringe upon their rights, as perhaps not one in every hundred are now living who were the primary causes of it, and but very few who can recollect anything of it; amongst the last, I consider myself one. I shall therefore, in this address, confine myself to a few facts which I can state from my own recollection; they may be insufficient to illustrate the whole, but may serve as a stimulus to induce some abler hand to make further investigation.

"It is a well-known fact, that the late Sir Richard Arkwright claimed the invention of cotton machinery in its first stage; that he obtained a patent, and erected some works (no matter where), for the purpose of spinning cotton yarns. Other persons and Firms too, anxious to lay hold of so lucrative a novelty, ventured upon the business, but were severely oppressed by a tax, which the patentee imposed upon the spindles of other machinery. It began now to be suggested that his claim to the invention was but a piracy, and that, consequently, the patent might be broke—a combination was formed against him—a trial came on, and the thing was done. It was now, when the trade was laid open, that mills for cotton spinning spread themselves over different parts of this country. In some places, scarcely a stream was permitted to run in its natural course, but was deviated for the purpose of working some mill, water being then the only motive power applied to such mills.

"It is now, where I begin the narrative of my own recollection. When a company intended to erect such a mill, a spot was selected which promised sufficient power, and was also convenient for working people; the place, if not their own

already, was engaged, either by purchase or lease. An engineer was sent to superintend the works; he generally brought with him such workmen as he deemed necessary for the undertaking; but, if he could not accomplish that, he was under the necessity of supplying the defect by engaging such as the locality afforded. It is almost needless to state, that those artizans were a medley of trades, various in their operative professions, but now united under one director, to produce one general effect. Amongst them, the millwright at that time claimed the pre-eminence; the rest were composed of carpenters, joiners, smiths, and clock-makers, who left their original trades for better wages, moulders and turners were then little known, the work being chiefly composed of wood, brass, malleable iron, and steel. Professional turners being then very rare, each artizan was under the necessity of learning to turn his own part. The moulding part being brass, had to be sent for to some distance, and at great expence. The work was all done in places where it had to remain; hence, great secrecy was observed, the place for some time was kept closed during working hours, and in order to expedite the same, liberal wages were allowed. It was at this time that wages began to advance; good workmen, previously, were satisfied with from ten to twelve shillings per week; whereas, now they could get from fourteen to sixteen, a material advance. And now, for the first corrupt seeds being sown, the men eager to earn great wages, the masters assiduously intent upon the completion of their works, in order to bring their twist to market as soon as possible, agreed to do the work by price, consequently a good price was given, and long hours wrought, each party being very desirous of a fortune. This was the time when taskmasters began to engage their work at a very liberal, but stipulated price; this enabled them to pay their workmen great wages, and also to induce them to longer hours than had been enacted in their original trades, because they did it for emolument. A weighty reason, I think, and one that weighs much with all humanity. Though very operose this work might be from the means above alluded to, it soon became finished, and put into active operation, and though many of the workmen were of course dismissed, it was still necessary to retain a part of them on the premises, there being, at that time, no machine shops, and the apparatus must be kept in order. Accordingly, the proprietors selected as many as they thought would suffice, and engaged them to stop on the ground to keep the works in repair; now, as they were chiefly the most efficient workmen, their wages were liberal, as many

hands had then from eighteen shillings to a guinea per week. Gentlemen, to be sure, who then could keep them company!

"Yet, mind how the ruly monster was mantling herself round the future privileges of their ill-fated successors; careless, or at the best thoughtless, about stipulating for the time of working, they wrought the mill hours, and many of them in their infancy were kept running night and day, it might be in either case they might be called for; but here I am not certain as to the time worked by night and by day, I rather suppose the day hours were from six in the morning until seven at night, and that they were changed weekly. Be that as it may, it was not of long duration, water, as I have said above, being the only power, it was only during some parts of the year they had a sufficiency, they therefore stopped their night working altogether, and the day time was permanently established from six to seven, all hands attending the same time, and as the mechanic's wages were higher than what their fellow-workmen received in other shops, the odd hour was considered to be remunerated by the extra wages they drew, and I believe none of the mechanical trades, except the wary millwright, had any idea of stipulating for time and wages altogether; they had, before this time, organised a union, and were very watchful over their rights; had the other mechanical trades followed their example, the struggles they have left to their successors would have been obviated, and the idea of one hour per day more than other workmen were employed would never have been entertained by either employer or employed, and instead of us having to contend with wealthier capitalists, a good understanding would have prevailed, and we should have found ourselves governed by good regulations, founded on reason, justice and equity.

"After mills had been a few years established, some thrifty part of the men who had been employed in them, began to study their own interest. They found the business lucrative and resolved to have a share in it. Some small shops were established for the construction of such machinery as could be constructed out of the mills, and I believe carding engines were the first things of the kind so undertaken; afterwards other parts of the apparatus began to appear in the shops, such as the jenny and its preparation, and afterwards the mule, though the first machine of that class I ever saw, ran eighty spindles; it was then a very portable piece of work, and well adapted to be made (in) a workshop. Machinery began at this time to be improved, workshops spread themselves over the country, and workmen were employed

under new masters, viz. Undertakers instead of the proprietors of mills, but as one object was that they all had in view, to get rich, the same, or very similar rules were observed in the shops as had been and still continued to be in the mills; there was the hired man, the piece man, and the day man, all of whom worked long time, or the extra hour at least; not yet perceiving how much the encroachment was advancing, or to what a disagreeable struggle they were leaving their successors exposed. Yet, one thing may be said, a little to expiate this charge of apathy in them; they considered that they did it for great wages, they did not foresee the consequences of the war which soon after broke out on the continent, and involved this country in so many difficulties, that by the constant advance in the prices of all the necessities of life, their extra wages soon became inadequate to their wants. But the case was so. They had now brought upon themselves an extra hour, for which they were no longer remunerated, because the value of money had fallen, through the advanced prices of provisions; trade too went through many vicissitudes, work was very often scarce, and this was no time, had they had any inclination, to seek for redress. But, as the machine-makers' wages at the present day do not exceed other mechanics', they ought, at least, to earn them in the same time, therefore, I conceive them to be right in requesting it."

In this quotation we have a clear account of the transition from the stage when those who started cotton mills had to equip them by utilising the most appropriate labour they could obtain, to the stage when specialised machine-shops appeared, and machine-making had become a distinctive craft. According to the author of the address, this labour, in the earlier stage, had not attained the status of the millwrights,[1] with the consequence that they submitted to a longer working day. In the latter part of his address he emphasises this difference as an indignity, and contends, that, although machine-makers are as useful as millwrights, " they have been degraded by having been shackled with one hour per day more than others," a position in which " reason, justice, and humanity call loudly for redress." Clearly, one factor in the " turn-out " was that by 1831 the machine-makers of Bolton had become a self-conscious body of craftsmen.

[1] For the dominant position of the millwrights in the early nineteenth century see Webb, *History of Trade Unionism* (1911), p. 187.

II

The next document brings us into touch with the wider aspects of the "turn-out." It consists of "An extract of an Address to the Members of the Machine and Steam Engine Makers' Friendly Society"[1] by John Murgatroyd of Bradford, Yorkshire. The address was originally published in October 1823, and the extract runs as follows:

"In addressing you on the subject of our trade, I will make the following hasty observations on the causes of good and bad trade. Good trade means nothing more than that there are fewer hands than can supply the demand for goods (machinery), and bad trade, that there are more hands than can be employed to supply that demand: therefore, however great the call for goods may be, if the number of hands be more than can supply such demand, it follows, as a matter of course, that trade becomes bad and wages low; and in this state there is no method can be taken to raise them, either by the employer or employed, or by the efforts of both, and consequently wages decline to the lowest ebb;—but on the contrary, if the number of hands be too small to complete the work required, wages will rise, and employers will gain more profit for the goods they manufacture. In order to attain this desirable end, it is necessary to prevent hands from multiplying too fast, and this can be done by a proper calculation of the proportion of apprentices to that of journeymen, and by preventing the introduction of men from other trades; to effect this the employer and the employed ought mutually to exert themselves, but the employers cannot have faith in each other, therefore the workmen must do it themselves, or fall degraded and unpitied."

The above extract forms part of a circular in which Mr. Murgatroyd draws attention to the position at Bolton, and makes an appeal to mechanics to "unite as one man and assist by . . . subscriptions all those worthy mechanics who are now standing out for our rights and liberties, and the improvement of our condition." He then proceeds to ask for "the names of all the mechanics in your town, distinguishing those who subscribe from those who do not," and also for "the names of the members of the New Union for the Protection of Our Trade," and mentions

[1] Maybe this is the "strong Yorkshire society dating from 1822" to which Mr. and Mrs. Webb refer (*History of Trade Unionism*, p. 190).

that " the expence of printing the whole will be paid by the mechanics of Bradford, or by me on their behalf."

Fortunately, some information of the character of this Union is given in another circular, issued by Mr. Murgatroyd, and addressed " To all Mechanics engaged in Making Steam Engines and Machines for the Preparing and Spinning of Worsted, Woollen, Cotton, Flax, Tow, and Silk." This circular is concerned with a meeting of the mechanics employed at Bradford on March 11, 1831, " when resolutions were past to support the trade, and to endeavour to form a Union of all mechanics, for that purpose alone."

Actually the resolutions are given in the form of rules for the proposed Union, the following being the most important of them :

> I. As it is the interest of the employers as well as the employed, that our trade be protected from a superabundance of hands, which greatly reduces the profit of the master and the wages of the workmen, it is our duty to assist and help to support those who may be thrown out of employ for resisting abuses of our trade; and for the sole purpose thereof, we join in Union with other mechanics, leaving each member to subscribe according to his will and circumstances.
>
> II. That no member of this Union shall go to work for any employer during any difference with his workmen, respecting the number of apprentices, taking workmen from other trades, a regulation of the hours of labour, or any other dispute affecting the welfare of the trade.
>
> III. That a correct list be taken of all the mechanics in every town where a branch of this Union is formed, distinguishing those who are favourable to the Union from those who are not, in order that the whole may be printed together and returned to the respective places; by which the unworthy men can be known at every town they go to reside at, and be considered as enemies and treated as such.
>
> IV. That when any mechanics belonging to this Union are out of employ, and require assistance, notice of the same be given to Bradford or some other branch, who must send circulars to the rest, stating the need they are in, but leaving to the judgment of each branch what sum to transmit. . . .
>
> V. That those persons now working at the trade, though not brought up to it, may enter this Union and remain

unmolested; but after the first day of July, 1831, all adults coming to the business shall be refused and turned out, and all apprentices must be bound for five years at the least prior to the age of twenty-one, and none shall be allowed to practise the trade under any other conditions.

VI. The hours of labour shall be from six o'clock in the morning until six in the evening, allowing half an hour for breakfast, an hour for dinner, and half an hour for tea; and on Saturdays the same time for breakfast and dinner, but no tea-time, and leave work at four o'clock in the afternoon.

VII. No member to work over-time while any member in the same place is out of employ, except there be no convenience for such member to work at the same shop or place. . . .

VIII. The entrance-money to this Union shall be one penny per member, which shall be expended in pens, ink, paper, and postages. When any assistance is required one week's notice shall be given, and the subscription or donation shall be forwarded to the place where it is wanted. . . . Should money be left on hand at any branch it shall be forwarded to the next place in need.

IX. At the end of every three calendar months a true list of members' names, and the subscriptions of each, together with the manner in which it is expended, shall be printed, and one or more copies shall be sent to each branch.

A comparison of Rules V and VI with the notice sent to Messrs. Dobson reveals their similarity; moreover, during the period of the "turn-out" the Bolton mechanics were supported exactly as is contemplated in the rules of the union. In its wider aspects it appears, therefore, that the "turn-out" at Bolton was a local instance of a movement, by the mechanics of Lancashire and Yorkshire, to secure uniform hours of labour and control of entries to their trade.

III

The "turn-out" at Messrs. Dobson's began on June 4th and, during its continuance, a four-page weekly report was issued for circulation to the mechanics of other towns. On the first page the questions at issue are stated, and an appeal made for support, with emphasis on a statement that the hours of labour per day in Bolton are greater than in most other towns. On the second page the contributions received during the week from the

different towns are given, with an account of how the money had been expended; the total weekly contributions from the beginning of the " turn-out "; a list of " Black Sheep "; and the following stereotyped letter:

> GENTLEMEN,
>
> We, the Mechanics of Bolton, return you our sincere thanks for your kindness and benevolence towards us. You will find inserted above, the sums received from different Towns. We divide the money as follows, that is, two shillings for the wife of each married man, and one shilling for each child under ten years of age, if not working, and [1] shillings to each man if it amount to that sum, if not, to be equally divided amongst us.
>
> GENTLEMEN,
>
> We solicit your kind assistance to complete what we have begun, hoping the termination will give satisfaction to all concerned. Should any of our Fellow Workmen require assistance, we will do our best endeavour to return the obligations we have received.
>
> Your Obliged Servants
> The Mechanics of Bolton.

The other pages of the report are utilised for exhortation, and comments on the situation, of which the following, issued in an early week of the " turn-out," is a typical example:

> FELLOW WORKMEN,
>
> We hail the present opportunity of tendering to you our warmest and most grateful acknowledgments for the liberal support we have already received from you, and to assure you of our firm and uncompromising adherence to the cause we have in hand, the cause which is not only ours, but that of every Mechanic in the United Kingdom, and in which we hope, ere long, to gain a glorious and triumphant victory;—then let us animate ourselves by the reflection, that the cause we are advocating will be beneficial both to ourselves and to the body of Mechanics generally, it is a cause in which Honesty, Truth, and Justice are contending with that Iron-hearted monster, Tyranny, supported by Despotism, Cruelty, and Oppression, and in which the

[1] This space was left blank except in one report at the beginning of the " turn-out," when it was filled by the figure 10.

former must ultimately conquer; it is a just cause, and one too in which we will stand firm, and rally round the Standard of Freedom and Justice, until, by our perseverance and consistency to one another, we shall strike terror into the hearts of those inhuman and despicable beings, whose only wish is to grind down the privileges of their operatives, until they are ten times more debased than the shackled slaves of Africa. . . .

With these considerations, and under these reflections, we are determined (with your assistance) to march on to victory, or perish in the conflict, and we are satisfied that our cause is just, and that the subtle, iron-hearted, and cruel oppressors must give way, and, like the rotten system of boroughmongers, sneak away from the sight of man, and try if they cannot Reform.

That the writings of William Cobbett were not unknown in Bolton requires no further evidence.

IV

According to the weekly reports the total contributions received at Bolton, during a period of 28 weeks—from June 4th to December 20th—amounted to £1,835 8*s*., and the expenditure to £1,840 8*s*., while, at the end of the period, there still remained " a stock on the books " of £4 15*s*.[1]

Over the 28 weeks the average weekly income from contributions was about £65. Exactly how many workmen were involved in the " turn-out " it is impossible to say. Before the notice was sent to Messrs. Dobson, one in exactly the same terms had been sent to three other firms in Bolton which together employed about 50 workmen. According to a statement in a report dated May 20th two of these firms complied with the notice, but the refusal of the other caused about 12 workmen to cease work. In the same report it is also stated that if the firms to which the notice had yet to be sent refused compliance, an additional 150 workmen would be involved. Thus it would appear that the contributions would have to be distributed among about 160 workmen, but

[1] During a period of 13 weeks for which reports are available contributions were received from 28 towns in Lancashire and Yorkshire and from a number of friends including John Murgatroyd. During this period the total contributions amounted to £881, Manchester heading the list with £295, followed by Preston with £102, Leeds with £91, Bury with £74, while, at the other end, some towns *e.g.* Warrington, contributed no more than a few shillings.

there is reason to think that this number is too large. Allowing for the " black sheep," a figure of about 120 for the whole period would probably be nearer the mark. Thus, from contributions, allowing £7 10*s.* a week for expenses, this number of " turn-outs " would be able to receive a weekly sum of about 9*s.* 6*d.* for themselves and their families.

Here, however, it should be mentioned that the contributions were not spread equally over the period. During the first three months of the " turn-out " the weekly amounts ranged between £80 and £90. Then there came a slump: in the first week of September the amount was less than £11. During the next few months there was a recovery to an average of about £60, which fell to about £40 for the remainder of the period. Actually, it appears that in August the " turn-out " reached a critical stage, one weekly report recording an increase in the number of " black sheep " from 12 to 24, though a statement which appeared in the *Manchester Courier* (August 13), that Messrs. Dobson had 50 men at work, was denied. No reports are available for September, but in the meantime we learn, from another source, of a disturbance at Bolton, when an attack was made on the " Elephant and Castle," where a number of new hands had assembled to drink their " footing," which resulted in eleven of the " turn-outs " being arrested and then released on bail in the sum of £40.[1]

When, at the beginning of October, the next weekly report becomes available, the number of " black sheep " had increased to 33, and new arrangements appear to have been made for the conduct of the " turn-out." A Committee at £1 2*s.* 9*d.* a week, and a secretary and " picquets " each at £1 10*s.* a week, appear as new items of expenditure. About the same time the *Manchester Guardian* (October 8) recorded that Messrs. Dobson " now pay by the Manchester time, which is within 2½ hours of the time demanded by the men when they turned out," [2] and that now they have a full complement of hands. It would appear, therefore, that the demands of the " turn-outs " had been partly conceded, but it is clear that the concession did not end the dispute. In fact, no mention of the concession is made in the available reports, rather they suggest the contrary. By the middle of December the number of " black sheep " had increased to 43, but, long before that time, although the mechanics of

[1] *Manchester Guardian*, September 17. I have been unable to trace the final result of this affair.

[2] The full demands involved a reduction of five hours a week.

Manchester were still expressing their resolution to support the mechanics of Bolton "in their unshaken determination still to stand out in defence of their just rights," public interest in the "turn-out" appears to have ceased. One interesting question which remains is the character of the trade union organisation which existed in 1831, but this question must be left for another article.

G. W. DANIELS

University of Manchester.

"BIDENTES HOYLANDIE"

(*A Mediæval Sheep-Farm*)

The historical importance of the overseas wool trade in the Middle Ages has long been recognised, and Customs accounts and Staple regulations afford accessible material for research. But the domestic side of the enterprise forms an almost unworked field, for the history of wool-growing is local, not national, and must be sought in the elusive account-rolls and stock-inventories of innumerable lay and ecclesiastical manors. Though isolated rolls are not rare, the consecutive series, covering several decades, is more difficult to find; and it is only from this that statistical evidence can be compiled, or any reconstruction of a mediæval sheep-farm attempted. Little is known, therefore, of the methods used by the wool-growing lord and his villeins, whose labour freighted the ships of the Celys and their predecessors.

Such is an excuse for analysing [1] in detail the sheep-farming records of the great Benedictine house of Crowland, which survive in a fairly consecutive series from 1258 to 1322; although to generalise from them is impossible, and to assert that the system which they disclose was typical even of this monastic order would be incautious.

The history of the Crowland sheep-run, as shown by these records, falls into four periods:

I. From 1258 to 1276, in which the sheep form a part of the general stock of the demesne.
II. From 1276 to 1289, which shows the beginning of a wider system, embracing all the manors of Crowland.
III. From 1289 to 1313, in which this system is developed and perfected.
IV. From 1313 to 1322, which is a period of decline.

I. 1258 to 1276.

The nucleus of the house of Crowland consisted of that island in the fens where S. Guthlac had taken up his vigil in the eighth

[1] By courtesy of the President and Fellows of Queens' College, Cambridge. These records are part of the accounts in the large collection of "Oakington Rolls" which is the property of the College.

century. Here were the monastery itself, and the four outlying granges of Munckelade, Asewyk, Brotherhous,[1] and Nomansland [2] (or, appropriately, the land of the patron saint, "terra sancti Gutlacy"). These granges were agricultural centres with no separate manorial organisation;—a handful of pens and byres, with huts for the men who tended the demesne stock. Here, in the fens which had been made habitable and to some extent civilised by the labours of the early monks, are disclosed the humble beginnings of the great sheep-run. The account of Brother Henry for the grange of Munckelade in 1258 shows a sum of 3171 sheep; while the "remainder" of 2112 from the previous year suggest that a flock was kept in earlier times for which no record survives.

In this first period, the sheep did not form a sufficiently prominent item of monastic revenue to be accorded a separate account and organisation. The stock appears in the annual inventory of Munckelade grange, while the expenses and receipts arising from it are entered in the general cash account of Asewyk or Nomansland. Nor is there any indication that the sheep-farming of the Crowland manors in the four shires of Lincoln, Huntingdon, Northampton and Cambridge was regarded as subject to any central organisation. Some of these manors kept sheep as early as 1258, as is shown in the first accounts of Langtoft (Lincs), Morborne (Hunts), Wellingborough (Northants), and Dry Drayton (Cambs); while by 1276 Bucknall and Dowdike (Lincs) were added to the number. There is record of independent sale and purchase of sheep, as of other stock, and of occasional interchange of animals among the manors. But it is significant that in 1258 and 1271 Langtoft sent up to Crowland all the money brought in by the sale of stock; and the same was done in the case of a wool-sale. The tithe of lambs and wool, which formed the chief source of income at Kirkhall (Lincs), was also sent up to the centre, either in kind or in the form of cash from the proceeds of sale.

It appears then that from the beginning there was a tendency to regard the profits of sheep-farming on a sub-manor as a seignorial monopoly, outside the control of the bailiff or reeve in charge.

[1] N. corner of the isle. Lincoln Record Society, Vol. XIV, 58 n.
[2] S.W. corner. *Ibid.*

II and III. 1276–1313.[1]

About the year 1276, the "Bidentes Hoylandie"[2] became a separate organisation, rendering to the lord a separate account, compiled by the head shepherd. It was evidently determined to make of them a paying enterprise on a large scale, and all the sub-manors suitable for sheep-farming were drawn into the scheme. Three of the Lincolnshire manors, Thetford, Fenhall, and Tunhall,[3] first appear as sheep-farming units, though showing a "remainder" of stock from the previous year (for which there is no record), which is reinforced by animals sent down from the centre.

From this date onwards much stock was contributed from the centre to all the manors, with the exception of Thetford and Langtoft, which were independent of central support, save for receipts of sheep in 1298, 1302 and 1304. The Cambridgeshire manors[4] also received stock only from 1297–99 (inclusive) and in 1308. These independent manors necessarily bought large quantities of stock for themselves, but the closer dependence of others upon supplies from the centre did not preclude them from making purchases, though on a small scale. They also carried on small sales of stock or skins.

In 1276 also, Fenhall, Tunhall, Morborne and Dowdike began the practice, which soon became general, of sending up annually to Crowland the fleeces after the summer shearing, the lambskins, and the wool-fells after the great Martinmas killing, when the meat was salted down for the winter. The manors were only allowed to keep and sell for themselves the "lana fracta" and "lana collecta," odd fragments which fetched about 2*s*. the stone. Some, if not all, of the year's lambs, and occasionally surplus full-grown stock, were also sent up to Crowland, "navigated" through the fens on rafts, obstreperous sheep confined in crates, as the account-rolls show; or else driven the long

[1] It is convenient to deal with the two periods 1276 to 1289, 1289 to 1313, as a whole, for there is no fundamental difference between them. The year 1289 marks a general extension of the organisation begun in 1276, and the revival of several manors (Thetford, Fenhall, Tunhall and Morborne) which had lapsed from the list of sheep-farms (see Table III). A general increase in the number of stock is also noticeable.

[2] "Hoyland" is the Lincolnshire Holland—the district around the isle of Crowland.

[3] The manor of Quappelade (Whaplode). The reeve's account is rendered for "Tunhall" and the collector's for Quappelade, but the areas would seem to be identical.

[4] Oakington and Cottenham were the latest of the Crowland manors to start sheep-farming, first appearing in 1296 (see Table III).

journey by road, two men being paid 3*d.* each for taking a flock of 160 " hoggeti " (yearlings) a distance of some thirty-five miles.

Here at Crowland were the great thatched wool-houses,[1] where the clip was stored till its sale or export; and here the monks and skilled workmen prepared the wool [2] for examination by the merchants. The head shepherd was assisted by a staff of under-shepherds, varying from the unpretentious number of two in 1277 to eleven in 1290, nineteen in 1299 and twenty-four in 1307. Each assistant was paid 2*s.* a year, with an allowance of grain and a lamb " pro markinglomb." These wages compare unfavourably with those of the shepherds of the sub-manors, who usually receive 4*s.* and also had the grain and the lamb. The perquisites of the position were, however, numerous, and the sums averaging about 15*s.* which were spent annually " circa lotionem et tonsionem " probably included free meals and perhaps extra wages.

The extent to which wool-growing and export had become a general occupation in the district is shown by the Hundred Rolls inquiry, " si quis durante discordia inter regem et Comitissam Flandrye . . . etc.," concerning the illicit taking of wools overseas. For the wapentake of Ellowe, where Crowland is situated, appears the entry, " dicunt quod omnes lane illius wapentakye vendite fuerunt in foris eiusdem . . . wapintakie de Ellowe, et cariate fuerunt usque ad Sanctum Botulfum sacci lane de eodem wapintakio per annum per estimacionem C saccos pretii sacci vii. m. Item dicunt quod Gilbertus de Welle, mercator, cariauit lanam iii. annis elapsis in partibus transmarinis xx. saccos . . . pretii sacci vii. m." [3]

The first indication of the merchants to whom the Crowland wool was annually sold [4] occurs in 1296, when Simon de Baston [5] and the head shepherd Simon Kynne were paid 6*s.* 5*d.* for their expenses " apud Lennam." In 1299 the *serviens* received 2*s.* 6*d.* for the same journey, and the wool was given to the " mercatores de Len " that year. In 1302 Simon went again to " Leen," spending 3*s.*, and the " mercatores de Lenna " received the wool.

[1] The building of a new wool-house cost 15*s.* 7*d.*

[2] " Item, iii. preparatoribus lane cum ii. adiutoribus iii.*s.* x.*d.* In expensis circa preparationem lane ii.*s.* vii.*d.*" (1290).

" Item, in stipendiis iiii. hominibus reparantibus (*sic*) lanam de . . . peltis. xiiii.*s.* in carne et pisce emptis pro preparatoribus lane ii.*s.* vi.*d.*" (1292).

[3] *Rot. Hund.* I. 276.

[4] After deduction of tithe for the church of Gedney (about fifteen fleeces).

[5] Professed monk. Dugdale, *Monasticon*, II. 121.

The men of Lynn,[1] therefore, were the most usual purchasers of Crowland wool; but there is no indication whether they were middlemen or merchant-exporters.

In 1283, however, John of Quappelade [2] was paid 13*s.* 4*d.* for his expenses "ultra mare," a hint that the monks at an earlier time may have entered into direct negotiations with the foreign buyer.[3]

It is unfortunate that no evidence survives of the prices paid by the merchants. The head shepherd's business was merely to hand over (*liberare*) the wool, and the cash transaction would appear only in the account of the Abbot's Receiver. Not until 1322 is the announcement that one Robert Elsy paid £60 for seven sacks of wool sold to him by the lord. This is an increase of nearly six marks the sack on the prices shown by the Hundred Rolls.

In 1297, the year of the maltoltes, Edward I received a grant of wool from the clergy,[4] and in this year all the Crowland wool, a total of 4570 fleeces, was given to the king. Apparently agents were sent out to collect the grant, for the rolls record, with characteristic frankness, the payment of a bribe of 5*s.* "to the servants of the knights taking wools on behalf of the king." It is possible that an entry of 1276 for the manor of Langtoft has reference to the customs of 1275, which the sheriffs were charged to proclaim throughout the counties; "in expensis domini G. de Cheyle, camerarius domini, R. Moyne, Robertus de Baston', magistri Henrici monachorum versus ordines mercatorum lane Regis. vi.*s.* viii.*d.*" There is no explanation of the statement, nor does anything similar occur at Crowland itself or at any of the other manors. Robert de Moyne was acting as sheriff of Cambridgeshire at the time,[5] while Gilbert de Cheyle had been sheriff of Lincolnshire and might then be under-sheriff; and it seems

[1] In 1278 the customs returns on wool, wool-fells and skins for Lynn are fifth in amount on a list of nine ports; Boston (S. Botolph) being first and even above London. *Victoria County History, Lincs*, II. 303.

[2] "Corrodarius." Dugdale, *Monasticon*, II. 121.

[3] In 1294 they contracted with the Italian Spini for the sale of the year's wool (thirty sacks) at 9 marks 10 shillings the sack. (Cf. prices quoted *supra*. The price of Crowland wool appears to have been steadily rising.) The wool was to be delivered at Boston fair, and the Italians paid £7 10*s.* for the packing. *P.R.O. Accounts* (Various), E. 101./126/7(2). (For this ref. I am indebted to Dr. E. Power.)

It is possible that the merchants of Lynn were afterwards agents for the Spini.

[4] "Lanas etiam religiosorum et aliorum de populo acceperat rex." Walt. of Hemingburgh, *Chronicon de gestis Regum Angliae*, II. 158.

[5] *P.R.O. Lists and Indexes*, IX. 12.

possible that the " ordines Regis " with which they were concerned were the Antiqua Custuma of that date.

IV. 1313–1322.

In 1313 (for which year there is no roll) an extraordinary change took place in the Crowland sheep-run. The fact that Gedney in 1292 had returned all its sheep to the centre, and that Fenhall, Tunhall and Dowdike had ceased between 1307 and 1310 to keep sheep, was a sign of the coming change; nevertheless the complete disappearance of all sheep from the rolls of 1314, except at Crowland itself and in Cambridgeshire, is startling. In an isolated roll for the year 1322, a few sheep appear under the dairy entry, but none were kept for their wool, and the Cambridgeshire manors also had ceased sheep-farming by this date.

No records survive in the Oakington collection after 1322 for Crowland or for any of the Crowland manors except Oakington itself. It is possible, however, that the apparent abandonment of organised sheep-farming was only a temporary and intentional expedient. It seemed to have occurred too suddenly and uniformly to have been other than a matter of deliberate policy; and there was no sign of any struggle to carry on the farm through a period of financial difficulty which might ultimately prove overwhelming,—for the profits in 1312 were high, the worst years being 1290, 1297, and from 1304 to 1306 (see Table II). The central run was still going on in 1322, although the stock, which had received an increase in 1314 from the animals sent back from the sub-manors, had fallen to one-sixth of the former totals. The wool, however, had risen in price to more than 12 marks the sack, and a fifteenth-century price list also mentions the wool of South Holland,[1] but it had now sunk to the value of 7 marks the sack, as in the Hundred Rolls. It was still, therefore, at the standard of " good " clip, though perilously near the dividing line between " good " and " middle " or inferior wool.[2] There is no means of discovering whether the sub-manors in general ever resumed sheep-farming. But in Cambridgeshire at least there are signs of spasmodic revival in and about 1392; for there is record that the sheep of Drayton and Cottenham were sheared at Oakington, and that the wool was sold by the Oakington reeve to John Herry of Cambridge, who paid 2*s.* 8*d.* a stone for it. The money, £6 16*s.*, was sent up to Crowland in the time-honoured

[1] E. Power, " The English wool-trade in the reign of Edward IV," *Cambridge Hist. Journal*, 1926, p. 23.

[2] *Ibid.*

fashion. In 1393, Oakington received stock from Cottenham and started a small sheep-farm, which continued for the six years for which record survives.

Apart from sales and the Martinmas killing for the larder, the chief decrease in stock was due to the ravages of murrain. Large sums were spent annually on tar, quicksilver, " verdegris," and " ointment " (butter and tallow) " ad oves medicinandum," amounting in bad years to £18 or £20, or a fourth of the total expenses. Murrain, however, did not cause a financial ruin comparable to that of modern foot-and-mouth disease, for there was no prejudice against eating the carcass of the victim, and his wool was sold as usual. Violent fluctuations in the numbers of stock were naturally caused by this plague. The sudden decrease in 1276, for example, must have been caused by the disease described by a contemporary as " infirmitas generalis, scilicet, scabies per totum corpus," which at that date " venit super oves Anglie." [1] The frequent references by chroniclers to such " general sickness," and even to plague effecting the whole of Christendom, are perhaps worth brief investigation. By comparing the figures for the worst murrain years at Crowland with those for the same years in the rest of Lincolnshire and in the other three counties, it has been possible to establish statistical evidence, which may be summarised as follows :

Date.	% stock lost in Holland.	% stock lost in the rest of Lincs.					% stock lost in Northants,	% stock lost in Hunts,	% stock lost in Cambs.		
		Langtoft.	Dowdike.	Tunhall.	Fenhall.	Thetford.	Wellingboro'.	Morborne.	Oakington.	Cottenham.	Drayton.
1258	40	31·9					70·5	37·8			
1281	23·8	25·8	4·2				20				15
1296	17·8	4·3	2·4	45·4	46·6	18	56·4	44·7	21·7	64·8	7
1302	20	14·1	8	4·2	11·2	16·7	18·8	31·5	58·1	33·3	20·8
1308	18·4	9·2	7·8		4·7	16	15·4	5·2	32·7	16·2	0
1314	27·6								10·5	9·8	0·8

The figures are not striking, but, far from supporting contemporary tales of uniform disease throughout England, they tend to emphasise the difference not only between county and county, but between different parts of the same county. The unusually low percentage at Dowdike, even when other manors are losing half or more of their stock, is maintained throughout the entire period, and not only in the years quoted above. The immunity of Drayton, as compared with the other Cambridgeshire manors, is noticeable. The height above sea-level, and

[1] *Chronicon Abbatie de Parco Lude*, Lincoln Record Soc., Vol. I. 18.

consequent freedom from fen-mist and damp, appears to have had no practical effect, for Dowdike, at an altitude of 17 feet, is one of the lowest lying of all the Crowland manors, being only a foot higher than the isle of Crowland itself. This vitiates the argument that might be drawn from the statistics of Dry Drayton, which is 114 feet above the sea at its highest part.

Were the traditional view of the isolation of the manor tenable, these figures would not have been surprising; for the risk of infection would have been reduced to a minimum and disease localised. But it has been shown that the main principle of the Abbot's system was constant communication between the outlying manors and the centre, most sales and purchases being done through that centre in a way which may perhaps be described as an application of the Staple system to the home production. Such an example of the working of a multiple estate, even for one purpose, may cause a reconsideration of the view that the manor was a self-sufficient unit.

F. M. Page

TABLE I.

The Crowland Sheep Run,[1] 1258–1322.

Date.	Remainder from previous year.	Sum, *i.e.*, Remainder, + acquisitions, lambs, purchases, contributions from manors, etc.	Lost by Murrain.	Total at end of year.	Total of wool in fleeces (vellera) at Crowland.	Sum-total of wool [2] in fleeces (vellera), *i.e.* Crowland wool + that of the manors.	Remarks.
1258	2112	3171	1280	1985		72	I. *Stock of Munckelade.*
1267	2955	3472	477	3725	None	mentioned.	
1271	3607	4825	445	3948		3031 +192 wool-fells (pelles lamutae).	Origin of wool unspecified. Probably from Crowland only, with no contributions from the manors.
1272	4048	5175	473	4174		3303	
1276	1911	3211	228	2221	990	4046	II. "*Bidentes Hoylandie.*"
1280	*c.* 3016	*c.* 5591	597	3720			N.B.—Omission of the hoggetts (yearling) item in the Accounts. I have made a deduction of their number by a comparison of the lamb item of the previous year with the "hoggetti adiuncti" item of the present year.
1281	*c.* 4120	*c.* 5674	1355	3510			
1282	3510	*c.* 5067	508	4074			
1283	4074	5317	956	3993			From 1283 onwards it is necessary to subtract the "hoggetti adiuncti" item from the ewes and wethers in the Acquired column, as they have their own item.
1285	4249	5386	998	3979	3549	3967	III.
1289	3433	5747	580	4240	2903	5405 +39 wool-fells.	
1290	3340	6211	932	3494 +"1486 at Aswik, Nomansland and Brotherhouse."	3580		
1291	5204	6906	592	4961	3981	7022	The staple at Lincoln (*Victoria County History, Lincs.* II).
1292	5161	7944	896	4803	4428	7092	
1296	4737	7416	1325	4246	3945	6123	
1297	3370	4954	335	4072	3018	4570	
1298	3872	*c.* 5779 (one item illegible)	482	4232	3261	5389	
1299	4232	6374	567	5089	3685	6084	
1302	4246	6375	1280	4178	3180	5073	
1304	3957	6412	870	4203	3147	5176	
1305	4203	6398	738	4637	3568	5125	
1307	4708	6554	655	5214	4130	6717	
1308	5334	7654	1412	5341	4116	6573	
1310	5874	8476	873	6505	5233	7830	
1312	6868	9547	1366	7145	6119	8178	
1314	8586	10961	3033	6840	6466	6502	
1322	2089	2655	621	1745	7 sacks +640 wool-fells.		IV. *Stock of demesne.*

[1] The chief difficulty in compiling these statistics was the uncertainty as to the use of the Long or Short hundred. Two symbols were used, an undecorated C and an ornate **C** which becomes general in or about 1283 and is expressly stated to be "maius centum." This gradually supersedes the undecorated C. In practice, however, the distinction which one feels was intended, was not observed, and both C and **C** stand equally for 120.

The yearlings were another difficulty, as the scribe enters them twice, under the ewes or wethers and in their own item (see note above).

As the records are copied by the Crowland scribe from the actual originals sent in, mistakes may be due as much to clerical as arithmetical inaccuracy. I have therefore attempted to correct only the more obvious errors, most of them being untraceable.

[2] A fleece weighed only from 1½ to 2 lbs. even as late as 1396. Cf. modern Lincolnshire staple, which attains 22 lbs.

Table II.

Profit and Loss of the Crowland Sheep Run, 1258–1322.

Date.	Receipts: chiefly stock, wool-fells and fells sold.	Expenses: chiefly stock bought, "medicine," upkeep of farm and liberationes.	Liberationes to lord or his receiver.	"Et debet de claro."	Profits (addition of liberationes and et debet de claro).
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1258	*c.* 1 0 9½	*c.* 1 0 8	Impossible to determine. Figures such as are obtainable have to be sought in the general accounts of Nomansland, Asewyk and Muncke lade. No separate Profit and Loss for the sheep-farm. Missing.		
1267	*c.* 16 3 2½	*c.* 25 17 2½			
1271	*c.* 26 12 5	*c.* 7 7 8½			
1272					
1276	87 1 9	86 18 0½	57 13 4	3 8½	57 17 0½
1280	13 10 0¾	13 7 5	None	2 7¾	2 7¾
1281	76 5 3½	75 11 6¾	62 10 5	13 8¾	63 4 1½
1282	51 4 1½	49 6 6	39 0 0	1 17 7½	40 17 7½
1283	54 16 11	53 1 11	40 16 2	1 15 0	42 11 2
1285	52 11 11½	46 13 4	21 13 4	5 18 7½	27 11 11½
1289	44 19 4	45 16 8½	15 0 0	Deficit 17 4½	14 2 7½
1290	19 2 7	18 11 7½	None	10 11½	10 11½
1291	69 14 0	68 15 3¾	15 9 4	18 8¼	16 8 0½
1292	132 5 1½	132 4 2½	44 6 8	11	44 7 7
1296	134 3 4	134 2 5½	78 2 0	10½	78 2 10½
1297	26 16 4¾	26 14 7½	None	1 9½	1 9½
1298	95 4 10	95 4 10	61 5 10	Balanced	61 5 10
1299	66 13 5½	66 13 9	22 0 0	Deficit 3½	21 19 8½
1302	84 3 4	84 2 3½	20 0 0	1 0½	20 1 0½
1304	67 7 2½	69 7 9½	None	Deficit 2 0 7	Loss 2 0 7
1305	64 0 5	63 19 3¾	1 7 6	1 1½	1 8 7½
1307	132 4 7	131 2 10	70 10 3	1 1 9½	71 12 0½
1308	144 0 7	135 11 8	71 5 0	8 8 11	79 13 11
1310	261 15 7½	219 6 9	60 0 0	42 8 10½	102 8 10½
1312	122 11 5½	96 16 2	30 0 0	(C.) 25 15 3½	55 15 3½
1314	(C.)203 5 3½	152 14 7	55 0 0	50 10 8½	105 10 8½
1322	*c.* 92 14 1	*c.* 27 5 0	Impossible to determine. Figures selected from the general stock account of the Inst Cf. *supra*.		aurus of Crowland

TABLE III.

Sheep of the Sub-Manors. Numbers sent to and received from the Centre.

Date.	Cambs.						Northants.		Hunts.		Lincs.												Only appearing intermittently.				Total sent to Centre.	Total received from Centre.
	Drayton.		Cotten-ham.		Oaking-ton.		Welling-boro'.		Morborne.		Langtoft.		Thetford.		Dowdike.		Fenhall.		Tunhall.		Gedney.		Bucknall.					
	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.	Sent.	Received.				
1258	Begins.						Begins.		Begins.		Begins.																	
1267															Begins.													
1271									*														Begins.					
1272							*		*						*													
1276									69				Begins.		96		Begins. 207		Begins. 203	30								
1280							132				*				120										575	30		
1281								172	Lapses.				Lapses.		100		Lapses.		Lapses.						252			
1282															90										100	172		
1283							2	23							90										90			
1285								1							45	71									92	23		
1289	38						268		112						131	1	202	256	251	522	Begins. 228	1			45	72		
1290							93		122					1	12	20	209	11	450		120	3	Lapses.		1230	780		
1291	60						80								150	8	242	31	239	25	18	20			1114	35		
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